# 3 SPORT SCIENCES CONGRESS



PROCEEDINGS BOOK











Dear Scientist,

We would like to express how happy we are bringing you, valuable scientist, together for the congress "The Future of Sports and Science" organized by School of Physical Education and Sports of Selçuk University and Sports Science Association.

As it is known, sports is an important element that unites people regardless of their language, religion and race. It is a stubborn fact that sports as part of a universal culture contributes world peace as well as its physical and mental effects. I care about this congress that has different perspectives in bringing the scientific evidence, discussion and methods of such an important concept together under the traditional sports science.

We are so happy to do the honors for "13<sup>th</sup> International Sports Sciences Congress" and host you, valuable scientists, in Konya, the capital of tolerance.

I pay my love and respects to all the participants.

Prof. Dr. Hakkı GÖKBEL

**Rector of Selçuk University** 

#### **WELCOME**

Dear Participants,

We are pleased to host you at the 13th International Sports Sciences Congress to be held by Selçuk University and Sport Sciences Association on November 7-9, 2014 at Rixos Hotel in Konya.

Associated with the theme "**Sport and Science in the Future**" as acknowledged to be the theme of the sport sciences congress of this year, has main fields such as "Physical Education and Sport", "Psycho-Social Areas in Sport", "Movement and Training Sciences", "Recreation", "Sport and Health Sciences" and "Sport Management". These topics shall be discussed within the context of keynote, invited, panel, oral and poster sessions. Within these main fields 5 keynote speakers, 13 invited speakers, 259 oral and 286 poster presentations will make contributions to the congress with their knowledge and experiences.

We would like to thank all the participants for sharing this exciting organization with us and speakers for their contributions on the theme of the congress.

Erbil HARBİLİ, PhD Congress Secretary

Hasan AKKUŞ, PhD Congress Chairman

Hasar Ahhuz

Gıyasettin DEMİRHAN, PhD President of Sport Sciences Association

# **COMMITTEES**

# **HONORARY COMMITTEE**

Prof. Hakkı GÖKBEL Rector of Selçuk University

Prof. Gıyasettin DEMİRHAN

Chairman of Sport Sciences Association

Prof. Nizamettin ÇİFTÇİ

Director of School of Physical Education and Sports of Selçuk University

# **CONGRESS CHAIRMAN**

Dr. Hasan AKKUŞ

# **ORGANIZING COMMITTEE**

Dr. S.Serdar BALCI

Dr. Selma KARACAN

Dr. Serkan REVAN

Dr. Sultan HARBİLİ

Dr. Sefa LÖK

Dr. İ. Bülent FİŞEKÇİOĞLU

Dr. Hamdi PEPE

# **CONGRESS SECRETARY**

Dr. Erbil HARBİLİ

# LOCAL ORGANIZING COMMITTEE

Dr. Metin SAHİN

Dr. Ekrem BOYALI

Dr. Mehmet PENSE

Dr. Zübeyde ASLANKESER

Dr. Adem CİVAN

Dr. Ezgi ERTÜZÜN

Dr. Mehmet ALTIN

Dr. Ali Osman KIVRAK

Dr. Erdal TAŞĞIN

Dr. Şükran ARIKAN

Selçuk BUĞDAYCI

Özlem ZENGİN

Y. Gökhan YALÇIN

Tuncay SARIİPEK

Bekir MEHTAP

Yusuf BARSBUĞA

Veysel BÖGE

Abdurrahim KAPLAN

Mustafa UYGUN

# **SCIENTIFIC COMMITTEE**

Dr. A. Ahmet DOĞAN Dr. A. Dilşad MİRZEOĞLU Dr. A. Haydar DEMİREL Dr. Ahmet ALPTEKİN Dr. Ali Emre EROL

Dr. Ali Murat ZERGEROĞLU

Dr. Alpay GÜVENÇ Dr. Aslan KALKAVAN Dr. Atilla ERDEMLİ Dr. Ayda KARACA Dr. Aysel PEHLİVAN Dr. Ayşe Kin İŞLER

Dr. Birol ÇOTUK Dr. Bülent AĞBUĞA

Dr. Bülent GÜRBÜZ Dr. Canan KOCA ARITAN

Dr. Caner AÇIKADA

Dr. Cengiz ARSLAN Dr. Dilara ÖZER

Dr. Dilşat ÇOKNAZ Dr. Emin ERGEN

Dr. Emine ÇAĞLAR Dr. Erdal ZORBA

Dr. Erman ÖNCÜ Dr. Ertuğrul GELEN

Dr. F. Hülya AŞÇI

Dr. Ferda GÜRSEL

Dr. Funda AKCAN AMCA

Dr. Füsun ÖZTÜRK KUTER Dr. Gazanfer DOĞU

Dr. Gülfem ERSÖZ Dr. Hasan KASAP

Dr. Hatice ÇAMLIYER

Dr. Hayri ERTAN

Dr. Hüsrev TURNAGÖL Dr. İbrahim YILDIRAN

Dr. Kamil ÖZER Dr. Kemal TAMER Dr. Leyla SARAÇ

Dr. M. Akif ZİYAGİL

Dr. M. Levent İNCE

Dr. Mehmet GÜLLÜ Dr. Mehmet GÜNAY

Dr. Mehmet KALE

Dr. Mehmet KUTLU

Dr. Mitat KOZ

Dr. Murat KALDIRIMCI

Dr. Murat KANGALGİL

Dr. Muzaffer ÇOLAKOĞLU

Dr. Müberra ÇELEBİ

Dr. Müslüm BAKIR

Dr. Nazan KOŞAR

Dr. Nazmi SARITAŞ

Dr. Nefise BULGU

Dr. Nevzat MİRZEOĞLU

Dr. Nigar KÜÇÜKKUBAŞ

Dr. Nilsel OKUDAN

Dr. Oğuz KARAMIZRAK

Dr. Osman İMAMOĞLU

Dr. Özbay GÜVEN

Dr. Ramiz ARABACI

Dr. Rasim KALE

Dr. S. Cem DİNÇ

Dr. S. Murat YILDIZ

Dr. Sadettin KİRAZCI

Dr. Salih PINAR

Dr. Sami MENGÜTAY

Dr. Serdar ARITAN

Dr. Şefik TİRYAKİ

Dr. Tahir HAZIR

Dr. Tennur YERLİSU LAPA

Dr. Ümit KESİM

Dr. Yavuz TASKIRAN

Dr. Yunus ARSLAN

Dr. Zekai PEHLİVAN

Dr. Ziya KORUÇ

# **KEYNOTE SPEAKERS**

- Dr. Håkan WESTERBLAD, SWE
- Dr. Hans Van Der MARS, USA
- Dr. Howard HALL, UK
- Dr. Mats BÖRJESSON, SWE
- Dr. Kenneth ROBERTS, UK

# **INVITED SPEAKERS**

- Dr. Atilla ERDEMLİ, TUR
- Dr. Ahmet TALİMCİLER, TUR
- Dr. Bülent ALTEN, TUR
- Dr. Deniz GÖKÇE, TUR
- Dr. Dilara ÖZER, TUR
- Dr. Erdal ZORBA, TUR
- Dr. Haydar A. DEMİREL, TUR
- Dr. Hüsrev TURNAGÖL, TUR
- Dr. M.Akif ZİYAGİL, TUR
- Dr. Sadi KURDAK, TUR
- Dr. Susana Gil OROZKO, ESP
- Dr. Sadettin KİRAZCI, TUR
- Dr. Ming-kai CHIN, USA
- Tuğrul AKŞAR, TUR

# **SCIENTIFIC PROGRAM**

November 7, 2014 Friday

General Program

10.00-10.15

				7, 2014 Friday		
08.30				istration		
09.30-10.15	Opening Ceremony Hall A					
	Hall A	Hall B	Selçuklu Hall	Alaaddin Hall	Karatay Hall	Sems Hall
10.15-11.00	Keynote					
	Session/					
	Physical					
	Education and					
	Sport: Hans Van					
	Der Mars					
11.00-11.45			Sema S	how <b>Hall B</b>		
11.45-12.00			Coff	ee Break		
12.00-12.30			Poster Present	ations/Poster Hall		
		Movem	ent and Training	Sciences Session1-S	ession2	
			Psycho-Social Ar	eas in Sport Session1		
			Physical Education	on and Sport Session1		
			Sport and Healt	h Sciences Session1		
				on Session1		
12.30-13.30				unch		
13.30-15.00	Panel/	Oral Pre/	Oral Pre/	Oral Pre/	Oral Pre/	
	Sport	Sport and Health	Movement	Movement and	Psycho-Social	
	Management	Sciences	and Training	Training Sciences	Areas in Sport	
	and Recreation:	Session1	Sciences	Session1	Session1	
	Ken Roberts,		Session2			
	Deniz Gökçe,					
	Tuğrul Akşar					
15.00-15.15			Coff	ee Break		
15:15-15.45			Poster Present	ations/Poster Hall		
				Sciences Session3-S	ession4	
			Psycho-Social Ar	eas in Sport Session2		
				gement Session1		
	Physical Education and Sport Session2					
			Sport and Healt	h Sciences Session2		
15.45-16.30	Keynote					
	Session/ Sport					
	Management					
	and Recreation:					
	Ken Roberts					
16.30-18.00	Oral Pre/	Oral Pre/	Oral Pre/	Oral Pre/	Oral Pre/	
	Physical	Movement and	Psycho-Social	Recreation	Physical	
	Education and	Training	Areas in Sport	Session1	Education and	
	Sport Session1	Sciences	Session2		Sport	
10.00.10.20	G . 6	Session3	0.15	0.15./	Session2	
18.00-19.30	Sport for All	Oral Pre/	Oral Pre/	Oral Pre/	Oral Pre/	
	Federation/	Movement and	Sport	Sport and Health	Psycho-Social	
	Erdal Zorba	Training	Management	Sciences Session2	Areas in Sport	
		Sciences	Session1		Session3	
		Session4				
20.00.22.00				G 1 : 1		
20.00-22.00			Openir	ng Cocktail		
			**	20110		
	TT ** 4	TT 11 75	i	, 2014 Saturday	T7 / TT 11	G ** "
00.20.10.00	Hall A	Hall B	Selçuklu Hall	Alaaddin Hall	Karatay Hall	Sems Hall
08.30-10.00	Panel/ Academic	Oral Pre/	Oral Pre/	Oral Pre/ Physical	Oral Pre/	Oral Pre/
	Career in Sport	Movement and	Physical	Education and	Sport and	Psycho-Social
	Sciences in	Training	Education and	Sport Session4	Health Sciences	Areas in Sport
	Turkey:	Sciences	Sport		Session3	Session4
	M.Akif Ziyagil,	Session5	Session3			
	Haydar					
	A.Demirel,					
	Bülent Alten					

Coffee Break

10.15-11.45	Panel / Movement and	Oral Pre/ Sport Management	Oral Pre/ Physical	Oral Pre/ Recreation	Oral Pre/ Psycho-Social	Oral Pre/ Psycho-Social
	Training	Session2	Education and	Session2	Areas in Sport	Areas in Sport
	Sciences:		Sport		Session5	Session6
	Håkan Westerblad.		Session5			
	Susana Gil					
	Orozko					
11.45-12.30	Keynote Session/ Psycho-					
	Social Areas in					
	Sport: Howard					
12.00.12.20	Hall		<u> </u>			
12.00-12.30		Movem		ations/Poster Hall Sciences Session5- S	ession6	
				Sport Session3- Session		
				on and Sport Session3		
12.30-13.30				h Sciences Session3 unch		
13.30-14.15	Keynote					
	Session/					
	Movement and					
	Training Sciences:					
	Håkan					
14.15.14.20	Westerblad		C ff	D I		
14.15-14.30				ee Break ations/Poster Hall		
11.30 13.00		Movem		Sciences Session7- S	ession8	
				eas in Sport Session5		
				on and Sport Session4 h Sciences Session4		
			-	gement Session2		
15.00-16.30			Panel /	Oral Pre/	Oral Pre/	Oral Pre/
			Physical Education and	Sport and Health Sciences Session4	Sport Management	Recreation Session3
			Sport: Hans	Sciences Session4	Session3	Sessions
			Van Der			
			Mars, Dilara			
			Özer, Sadettin Kirazcı			
16.30-18.00			Workshop/	Oral Pre/	Oral Pre/	Oral Pre/ Sport
			Physical	Movement and	Movement and	Management
			Education and Health:	Training Sciences Session6	Training Sciences	Session4
			Thomas Root,	Bessiono	Session7	
			Ming-kai			
			Chin			
18.00-20.00			Sport Sciences	Oral Pre/ Physical Education and		
			Association	Sport Session10		
			Meeting/Cong	•		
			ress Candidate Presentations			
20.00-22.00				ess Dinner		
	TT. 11 A	II. II D		9, 2014 Sunday	T7 4 TT 22	C II II
08.45-10.15	Hall A Panel/ Sport and	Hall B Oral Pre/	Selçuklu Hall Oral Pre/	Alaaddin Hall Oral Pre/	Karatay Hall Oral Pre/	Sems Hall Oral Pre/
00.43-10.15	Health Sciences:	Physical	Physical	Sport	Recreation	Psycho-Social
	Mats Börjesson,	Education and	Education and	Management	Session4	Areas in Sport
	Sadi Kurdak, Hüsrey Turnagöl	Sport Session6	Sport Session7	Session5		Session7

Oral Pre/

Hüsrev Turnagöl

Panel / Psycho-

10.15-10.30

10.30-12.00

Session7

Oral Pre/

Oral Pre/

Coffee Break

Oral Pre/

Oral Pre/

	Social Areas in Sport: Howard Hall, Atilla Erdemli, Ahmet	Movement and Training Sciences Session8	Movement and Training Sciences Session9	Movement and Training Sciences Session10	Sport and Health Sciences Session5	Movement and Training Sciences Session11
12.00-12.30	Talimciler		Poster Present	 ations/Poster Hall		
12.00 12.30		Movement an		es Session9- Session	10- Session11	
				Sport Session6- Session		
		•		on Session2		
12.30-13.30			L	unch		
13.30-14.15	Keynote					
	Session/ Sport					
	and Health					
	Sciences:					
	Mats Börjesson					
14.15-14.30				ee Break		
14.30-16.00	Oral Pre/	Oral Pre/	Oral Pre/	Oral Pre/ Physical	Oral Pre/ Sport	Oral Pre/
	Psycho-Social	Psycho-Social	Physical	Education and	Management	Movement and
	Areas in Sport	Areas in Sport	Education and	Sport Session9	Session6	Training
	Session8	Session9	Sport			Sciences
			Session8			Session12
16.00-17.00	Congress Handover, Award and Closing Ceremony					

# **Detailed Program**

	November 7, 2014 Friday
08.30	Registration
09.30-10.15	Opening Ceremony Hall A
10.15-11.00	Keynote Session -Physical Education and Sport/ Chair: Dr. Gıyasettin Demirhan
	Hall A
	Hans Van Der Mars, USA "Whole-School Physical Activity Programs A Road to Relevance and
	Credibility?"
11.00-11.45	Sema Show Hall B
11.45-12.00	Coffee Break
12.00-12.30	Poster Presentations
	Poster Hall Movement and Training Sciences, Session 1, Session 2
	Movement and Training Sciences Session1- Session 2 Psycho-Social Areas in Sport Session 1
	Physical Education and Sport Session 1
	Sport and Health Sciences Session 1
	Recreation Session 1
12.30-13.30	Lunch
13.30-15.00	Panel -Sport Management and Recreation/ Chair: Dr. Erdal Zorba
	Hall A
	Ken Roberts, USA "Global Trends in Leisure and the Implications for Sports Management"
	Deniz Gökçe, TUR "The Infrastructure of the Turkish Football System"
	Tuğrul Akşar, TUR "The Restructuring, Economic Development and Problems of Turkish Football"
	Oral Presentations/ Sport and Health Sciences -Session 1
	Hall B
	Oral Presentation / Movement and Training Sciences -Session 1
	Alaaddin Hall
	Oral Presentations / Psycho-Social Areas in Sport-Session 1
	Karatay Hall Oral Presentation / Movement and Training Sciences -Session 2
	Selçuklu Hall
15.00-15.15	Coffee Break
15:15-15.45	Poster Presentations
	Poster Hall
	Movement and Training Sciences Session 3- Session 4
	Psycho-Social Areas in Sport Session 2
	Sport Management Session 1
	Physical Education and Sport Session 2
17.17.14.00	Sport and Health Sciences Session 2
15.45-16.30	Keynote Session -Sport Management and Recreation/ Chair: Dr. Bülent Gürbüz
	Hall A
	Ken Roberts, USA "Sport in the context of leisure and recreation: implications for the research agenda"
16.30-18.00	Oral Presentations / Physical Education and Sport-Session 1
10.50 10.00	Hall A
	Oral Presentations / Movement and Training Sciences-Session 3
	Hall B
	Oral Presentations / Recreation-Session 1
	Alaaddin Hall
	Oral Presentations / Physical Education and Sport-Session 2
	Karatay Hall
	Oral Presentations / Psycho-Social Areas in Sport-Session 2
	Selçuklu Hall
18.00-19.30	Sport for All Federation/ Chair: Dr. Hasan Akkuş
	Erdal Zorba, TUR "The place and importance of Sport for All in Turkey and the World"
	Hall A
	Oral Presentations / Movement and Training Sciences-Session 4
	Hall B

	Oral Presentations/ Sport and Health Sciences -Session 2
	Alaaddin Hall
	Oral Presentations / Psycho-Social Areas in Sport-Session 3
	Karatay Hall
	Oral Presentations / Sport Management-Session 1
	Selçuklu Hall
20.00-22.00	Opening Cocktail

	November 8, 2014 Saturday
00 20 10 00	
08.30-10.00	Panel- Academic Career in Sport Sciences in Turkey/ Chair: Dr. Gıyasettin Demirhan M. Akif Ziyagil, TUR
	Haydar A Demirel, TUR
	Bülent Alten, TUR
	Hall A
	Oral Presentations / Movement and Training Sciences-Session 5
	Hall B
	Oral Presentations / Physical Education and Sport-Session 3
	Selçuklu Hall
	Oral Presentations / Physical Education and Sport-Session 4
	Alaaddin Hall
	Oral Presentations / Sport and Health Sciences-Session 3
	Karatay Hall   Oral Presentations / Psycho-Social Areas in Sport-Session 4
	Sems Hall
10.00-10.15	Coffee Break
10.15-11.45	Panel - Movement and Training Sciences/ Chair: Dr. Hayri ERTAN
	Hall A
	Håkan Westerblad, SWE "Beneficial effects of dietary nitrate on skeletal muscle performance"
	Susana Gil Orozko, ESP "The Relative Age Effect in Sport"
	Susana Gil Orozko, ESP "Talent Identification in Soccer"
	Oral Presentations / Sport Management-Session 2 Hall B
	Oral Presentations / Physical Education and Sport-Session 5
	Selçuklu Hall
	Oral Presentations / Recreation-Session 2
	Alaaddin Hall
	Oral Presentations / Psycho-Social Areas in Sport-Session 5
	Karatay Hall
	Oral Presentations / Psycho-Social Areas in Sport-Session 6 Sems Hall
11.45-12.30	Keynote Session - Psycho-Social Areas in Sport/ Chair: Dr. Emine Çağlar
	Hall A
	Howard Hall, UK "From heightened achievement striving to psychological debilitation and burnout:
	The influence of perfectionism on motivational processes in sport"
12.00-12.30	Poster Presentations
	Poster Hall
	Movement and Training Sciences Session 5- Session 6
	Psycho-Social Areas in Sport Session 3 - Session 4
	Physical Education and Sport Session 3 Sport and Health Sciences Session 3
12.30-13.30	Lunch
13.30-14.15	Keynote Session - Movement and Training Sciences/ Chair: Dr. Haydar A Demirel
20100 11113	Hall A
	Håkan Westerblad, SWE "Mechanisms of skeletal muscle fatigue and recovery"
14.15-14.30	Coffee Break
14:30-15.00	Poster Presentations

	Poster Hall
	Movement and Training Sciences Session 7- Session 8
	Psycho-Social Areas in Sport Session 5
	Physical Education and Sport Session 4
	Sport and Health Sciences Session 4
	Sport Management Session 2
15.00-16.30	Panel - Physical Education and Sport/ Chair: Dr. Hasan KASAP
	Selçuklu Hall
	Hans Van Der Mars, USA "Trends and issues in Doctoral-Physical Education Teacher Education Programs"
	Dilara Özer, TUR "The Attitude of Physical Education Teachers towards Children with Intellectual Disabilities"
	Sadettin Kirazcı, TUR "The Two Halves of an Apple: Pedagogy and Skills Learning"
	Oral Presentations / Sport and Health Sciences-Session 4 Alaaddin Hall
	Oral Presentations / Sport Management-Session 3
	Karatay Hall
	Oral Presentations / Recreation-Session 3
	Sems Hall
16.30-18.00	Workshop/ Physical Education and Health/ Chair: Dr.M.Levent İnce
	Selçuklu Hall
	Ming-kai Chin and Thomas Root, USA "Innovative Physical Education and Health with Linkage to
	the Community through Interactive Technology"  Oral Presentations / Movement and Training Sciences-Session 6
	· · · · · · · · · · · · · · · · · · ·
	Alaaddin Hall Oral Presentations / Movement and Training Sciences-Session 7
	Karatay Hall
	Oral Presentations / Sport Management-Session 4
	Sems Hall
18.00-20.00	Sport Sciences Association Meeting Congress Candidate Presentations / Chair: Dr.Ümit Kesim
13.00 20.00	Selçuklu Hall
	Oral Presentations / Physical Education and Sport-Session 10
20.00-22.00	Congress Dinner
	1

	November 9, 2014 Sunday
08.45-10.15	Panel - Sport and Health Sciences/ Chair: Dr. A. Murat ZERGEROĞLU
	Hall A
	Mats Börjesson, SWE "Evaluation of master athletes"
	Sadi Kurdak, TUR "How will the sciences of sport affect the healthcare structure in the following
	years?"
	Hüsrev Turnagöl, TUR "Nutrient-Gene and Exercise: Nutrigenomics"
	Oral Presentations / Physical Education and Sport Session 6
	Hall B
	Oral Presentations / Physical Education and Sport Session 7
	Selçuklu Hall
	Oral Presentations / Sport Management-Session 5
	Alaaddin Hall
	Oral Presentations / Recreation-Session 4
	Karatay Hall
	Oral Presentations / Psycho-Social Areas in Sport-Session 7
	Sems Hall
10.15-10.30	Coffee Break
10.30-12.00	Panel - Psycho-Social Areas in Sport/ Chair: Dr. Hülya Aşçı
	Hall A
	Howard Hall, UK "An eye on the future! How sport psychology can be applied to address a global
	health problem. The PAPA Project - A large scale, EU funded, collaborative intervention project to

	Promote Adolescent Health through Physical Activity"
	Atilla Erdemli, TUR "Sports and Philosophy in Turkey"
	Ahmet Talimciler, TUR "Sports Sociology in Turkey: Will it become a domain with new questions
	and answers?"
	Oral Presentations / Movement and Training Sciences-Session 8
	Hall B
	Oral Presentations / Movement and Training Sciences-Session 9
	Selçuklu Hall
	Oral Presentations / Movement and Training Sciences-Session 10
	Alaaddin Hall
	Oral Presentations / Sport and Health Sciences-Session 5
	Karatay Hall
	Oral Presentations / Movement and Training Sciences-Session 11
	Sems Hall
12.00-12.30	Poster Presentations
	Poster Hall
	Movement and Training Sciences Session 9- Session 10- Session 11
	Psycho-Social Areas in Sport Session 6- Session 7
	Recreation Session 2
12.30-13.30	Lunch
13.30-14.15	Keynote Session- Sport and Health Sciences/ Chair: Dr. Sadi KURDAK
	Hall A
	Mats Börjesson, SWE "Physical Activity prescriptions for older age"
14.15-14.30	Coffee Break
14.30-16.00	Oral Presentations/Psycho-Social Areas in Sport-Session 8
	Hall A
	Oral Presentations/Psycho-Social Areas in Sport-Session 9
	Hall B
	Oral Presentations / Physical Education and Sport-Session 8
	Selçuklu Hall
	Oral Presentations / Physical Education and Sport-Session 9
	Alaaddin Hall
	Oral Presentations /Sport Management-Session 6
	Karatay Hall
	Oral Presentations / Movement and Training Sciences-Session 12
	Sems Hall
16:00-17.00	Congress Handover, Award and Closing Ceremony

# KEYNOTE SESSIONS

November 7, 2014 Friday				
KEYNOTE SESSION 1 Physical Education and Sport				
Speaker: Hans Van Der Mars, USA  Chair: Dr. Gıyasettin DEMİRHAN				
Whole-School Physical Activity Programs A Road to	Time:10.15-11.00			
Relevance and Credibility?	Hall A			
KEYNOTE SESSION Sport Management and Re	- · -			
Speaker: Ken Roberts, UK	Chair: Dr. Bülent GÜRBÜZ			
Sport in the context of leisure and recreation: implications for	Time:15.45-16.30			
the research agenda	Hall A			
November 8, 2014 Sat				
KEYNOTE SESSION Psycho-Social Areas in				
Speaker: Howard Hall, UK Chair: Dr. Emine ÇAĞLAR				
From heightened achievement striving to psychological	Time:11.45-12.30			
debilitation and burnout: The influence of perfectionism on motivational processes in sport	Hall A			
KEYNOTE SESSION Movement and Training St				
Speaker: Håkan Westerblad, SWE	Chair: Dr. Haydar A DEMİREL			
Mechanisms of skeletal muscle fatigue and recovery	Time:13.30-14.15			
	Hall A			
November 9, 2014 Sunday				
KEYNOTE SESSION 5 Sport and Health Sciences				
Speaker: Mats Börjesson, SWE	Chair: Dr. Sadi KURDAK			
Physical activity prescriptions for older age	Time:13.30-14.15			
Laysteat activity prescriptions for other age	Hall A			

# **PANELS**

November 7, 2014 Friday					
	PANEL 1				
Sport Management and Recreation					
Chair	Dr. Erdal ZORBA				
	Global Trends in Leisure and the Implications for Sports Management Ken Roberts, UK				
Title/Speaker	"The Infrastructure of the Turkish Football System" Deniz Gökçe, TUR				
	"The Restructuring, Economic Development and Problems of Turkish Football" Tuğrul Akşar, TUR				
Time	13.30-15.00				
Salon	Hall A				
	November 8, 2014 Saturday				
	PANEL 2 Academic Career in Sport Sciences in Turkey				
Chain					
Chair	Dr. Gıyasettin DEMİRHAN				
Title/Speaker	"The problems and solution proposals in the process of associate professorship in sport sciences"  M. Akif Ziyagil, TUR  Haydar A Demirel, TUR  Bülent Alten, TUR				
Time	08.30-10.00				
Salon	Hall A				
	PANEL 3 Movement and Training Sciences				
Chair	Dr. Hayri ERTAN				
	"Beneficial Effects of Dietary Nitrate on Skeletal Muscle Performance" Håkan Westerblad, SWE				
Title/Speaker	"The Relative Age Effect in Sport" Susana Gil Orozko, ESP				
	"Talent Identification in Soccer" Susana Gil Orozko, ESP				
Time	10.15-11.45				
Salon	Hall A				
PANEL 4 Physical Education and Sport					
Chair	Dr. Hasan KASAP				
	"Trends and Issues in Doctoral-Physical Education Teacher Education Program" Hans Van Der Mars, USA				
Title/Speaker	"The Attitude of Physical Education Teachers towards Children with Intellectual Disabilities" Dilara Özer, TUR				

	"The Two Halves of an Apple: Pedagogy and Skills Learning"				
	Sadettin Kirazcı, TUR				
Time	15.00-16.30				
Salon	Selçuklu Hall				
	November 9, 2014 Sunday				
	PANEL 5				
	Sport and Health Sciences				
Chair	Dr. A. Murat ZERGEROĞLU				
	"Evaluation of master athletes"				
	Mats Börjesson, SWE				
Title/Speaker	"How will the sciences of sport affect the healthcare structure in the following years?"				
Title/Speaker	Sadi Kurdak, TUR				
	"Nutrient-Gene and Exercise: Nutrigenomics"				
Time:	Hüsrev Turnagöl, TUR 08.45-10.15				
Salon:	Hall A				
	PANEL 6 Psycho-Social Areas in Sport				
Chair	Dr. Hülya AŞÇI				
	"An eye on the future! How sport psychology can be applied to address a global health problem. The PAPA Project - A large scale, EU funded, collaborative intervention project to Promote Adolescent Health through Physical Activity"  Howard Hall, UK				
Title/Speaker	"Sports and Philosophy in Turkey" Atilla Erdemli, TUR				
	"Sports Sociology in Turkey: Will it become a domain with new questions and answers?"  Ahmet Talimciler, TUR				
Time:	10.30-12.00				
Salon:	Hall A				

# SPORT SCIENCES ASSOCIATION MEETING

November 8, 2014 Saturday		
SPORT SCIENCES ASSOCIATION MEETING		
Chair	Dr. Ümit KESİM	
Title/Speaker	Sport Sciences in the Future Gıyasettin Demirhan, TUR	
Time	18.00-20.00	
Salon:	Selçuklu Hall	

# WORKSHOP

November 8, 2014 Saturday		
Physical Education and Health		
Chair:	Dr.M.Levent İNCE	
Title/Speaker	Innovative Physical Education and Health with Linkage to the Community through Interactive Technology  Ming-kai Chin, USA Thomas Root, USA	
Time:	16.30-18.00	
Salon:	Selçuklu Hall	

# SPECIAL SESSION

November 7, 2014 Friday		
Sports for All Federation		
Chair	Dr. Hasan AKKUŞ	
	"The place and importance of Sport for All in Turkey and the World"	
Title/Speaker	Erdal Zorba	
Time	18.00-19.30	
Salon	Hall A	

# **ORAL PRESENTATIONS**

November 7, 2014 Friday/Oral Presentations

Sport and Health Sciences/Session 1/Hall B/ 13.30-15.00

Chair: Dr. Salih PINAR

**OP125.** The Effect of Birth Weight on Some Physical Fitness Parameters of 8-to10- Year- Old Children Gökmen ÖZEN, Muhammed Emin KAFKAS

**OP180.**The Research of the Effects of Plates Exercise Program on Flexibility and Body Composition Hakan YAPICI, Sinan AYAN, Mehmet ULAS

**OP322.** Female Preservice Teachers' Physical Activity Participation Habits

Sonnur KÜÇÜK KILIÇ, Nurgül KESKİN, Serdar ALEMDAĞ, Erman ÖNCÜ

**OP597.** The Relationship Between Physical Activity and Cognitive Status in The Elderly Neslihan LÖK, Sefa LÖK

**OP668.** An Investigation of Making Physical Activity Status and Prevent Factors of the Participation to Physical Activity among University Students

<u>Eren ULUÖZ</u>, Zeynep Filiz DİNÇ, Ali İhsan AVLUK, Cem Yoksuler YILMAZ, Arzu DÖNMEZ, Mert ÇAYIRCI, Semih NAMLI, Bayram BULMUŞ, İsmail GÜVEN, Semiha EKER, Mehmet DÖĞER, Okan ANTEKELİ

**OP679.** Screen Time Differences in terms of Some Socio-Demographic Variables in the University Students Emine ÇAĞLAR, Ayda KARACA, Naile BİLGİLİ, Gökhan DELİCEOĞLU

Movement and Training Sciences /Session 1/Alaaddin Hall/13.30-15.00

Chair: Dr. Gürbüz BÜYÜKYAZI

**OP10.** A New Measuring Efficiency for Basketball Using Fuzzy Clustering Analysis

Necati Alp ERILLI, Egemen ERMIŞ

OP68. Effects of Vibration on Multi-Muscle Synergies during Voluntary Body Sway

Pınar ARPINAR AVŞAR, Stanislaw SOLNIK, Yen-Hsun WU, Mark LATASH

**OP130.** Comparison of Biometric Measurement Values of Ossa Antebrachii in Weightlifters and Sedentary Individuals

Mehmet Emin YILDIZ, Kamil BEŞOLUK

**OP150.** Load - Power Relationship in the Propulsive Phase of Full Squat Movement İbrahim CAN, Hamit CIHAN, Erdal ARI

**OP306.** Reliability and Validity of New Tests on Agility and Skill For Female Amateur Soccer Players Mehmet KUTLU, Hakan YAPICI, Abdullah YILMAZ

OP365. VO<sub>2</sub>peak and VO<sub>2</sub>max Differences May Be Related to Gap in Peak Stroke Volume and Stroke Volume at VO<sub>2</sub>peak

Muzaffer ÇOLAKOĞLU, Özgür ÖZKAYA, Görkem Aybars BALCI, Bülent YAPICIOĞLU

Psycho-Social Areas in Sport /Session 1/Karatay Hall/13.30-15.00

Chair: Dr. Emine CAĞLAR

**OP 09.** Study of the Peer Support Levels among College Students

Erdoğan TOZOĞLU, Gökhan BAYRAKTAR, Bilal CİNGÖZ, Serkan Tevabil AKA

**OP 46.** Determining The Aggression Levels of Spectators Involved in Events in Football Competitions Savas SANLI, Mehmet GÜÇLÜ

**OP64.** Determination of the Sport Motivations and Life Quality of the Physical Education and Sports College Students

Damla ERCAN, İpek AYDIN, Özkan TÜTÜNCÜ

**OP152.** The Metacognitive Awereness Levels of The Secondary School Students Who Do Sports With Alicence and The Ones Who Don't Do Sports

Soner TUZCUOĞLU, Gülsen ÖZCAN

**OP156.** Aspects / Direction of intimidation behaviours that the football referees are exposed to Serkan HACICAFEROĞLU, Cemal GÜNDOĞDU, Burhanettin HACICAFEROĞLU

**OP246.** Life Satisfaction and Peer Attachment among Physical Education and Sport School Students Necati GÜRSES, <u>Sonnur KÜÇÜK KILIÇ</u>, H.Mehmet TUNÇKOL, Erman ÖNCÜ

Movement and Training Sciences /Session 2/Selçuklu Hall/13.30-15.00

Chair:Dr. Tahir HAZIR

**OP8.** The Effects of Different Intensity Resistance Exercise Programs on the Levels of Oxidative Stress Markers, Uric Acid, 8-Isoprostaglandin F2α, and 8-Hydroxy-2'-deoksiguanosine in Premenopausal Women <u>Hasan ESEN</u>, Gürbüz BÜYÜKYAZI, Cevval ULMAN, Fatma TANELI, Hakan TIKIZ, Mehmet GÖRAL, Sema BILGE, Yeliz DOĞRU

**OP76.** Examination of the Effect of Fatigue on Young Basketball Players

Olcay MÜLAZIMOĞLU, Şenol YANAR, Ahmet Tunca EVCIL, Ahmet DUVAN

**OP108.** The Effects of Static Stretching Exercises on Anaerobic Performance in Male Athletes with Different Flexibility Levels

Merve KOCA, Atalay ARKAN, Sercin KOSOVA

**OP153.** Improvement in Acute Exercise-Induced Muscular Damage and functional adaptations after a soccer specific training

Nima GHARAHDAGHI, Mohammad Reza KORDI, Abbas Ali GAEINI, Sadegh ABBASIAN

**OP517.** The Effects of Exercise-Induced Muscle Damage on Balance

Tuğba KOCAAĞA, Ümid KARLI

**OP572.** Comparison of Muscle Damage in Soccer Players After Playing Matches on Artificial Turf and Natural Turf Fields

Serdar SUCAN, Soner AKKURT, Alper GÜMÜŞ, Mehmet KARAKUŞ

# November 7, 2014 Friday/Oral Presentations

#### Physical Education and Sport/Session 1/ Hall A/ 16.30-18.00

Chair: Dr. Sadettin KİRAZCI

**OP65.** The Analysis of Liking of Children and Emotional Intelligence in terms of Certain Variables for Candidate Teachers of Physical Education

Zekai PEHLİVAN, Özlem ALAVLI, Elif Nilay ADA, Fatma ÇEPİKKURT

**OP202.** Reflection on a Didactic Transposition of Pole Vaulting: From a Performance Sport to a School Practice in Physical Education and Sport

Derbali CHAWKI, Alı ELLOUMI

**OP316.** The Effects of A Physical Activity (Swimming) on The Motor Skills and Severe Crises of Children With Autism Spectrum Disorder (ASD)

Ebubekir AKSAY

**OP382.** The Effects of Wheelchair (WC) Mobility Courses on WC Usage Skills

Ebubekir AKSAY, Horst STROHKENDL

**OP546.** Exploration of Influences of an Awareness Development Program about People with Intellectual Disabilities on the Attitudes of Secondary School Students

Elif LERMİ, Dilara ÖZER, İlknur HACISOFTAOĞLU

# Movement and Training Sciences /Session 3/ Hall B/ 16.30-18.00

Chair: Dr. Kamil ÖZER

**OP7.** Do Progressive Resistance Training Programs of Different Intensities Affect the Levels of Cardiac Risk Markers, YKL-40, Matrix Gla Protein, and hsC-Reactive Protein in Premenopausal Women?

<u>Hasan ESEN,</u> Gürbüz BÜYÜKYAZI, Fatma Taneli ULMAN, Cevval ULMAN, Hakan TIKIZ, Mehmet GÖRAL, Sema BILGE, Yeliz DOĞRU

**OP127.** Comparison of Change of Direction Repeated Sprint Performance Between Professional and Amateur Young Soccer Players Among 14-17 Years Old

Mehmet Gören KÖSE, Emin ERGEN, Atakan YILMAZ

**OP212.** The Effects of Altitude Training on Some Anthropometric and Physiological Variables of Elite Swimmers

<u>Funda COŞKUN</u>, C. Çağlar BILDIRCIN, Çiğdem ÖZDEMIR, Özgür GÜNAŞTI, Kerem Tuncay ÖZGÜNEN, Sanlı Sadi KURDAK

**OP247.** The Effects of Intensive Training on Selected Sex Hormones in Young Wrestlers

<u>Faruk YAMANER</u>, Yetkin Utku KAMUK, Taner BAYRAKTAROĞLU, Mustafa GÜMÜŞ, Tevfik Cem AKALIN

**OP363.** Calculation of Energy Consumption by Thermal Behavior Data in Exercise

Görkem Aybars BALCI, Özgür SOKAT, Tahsin BAŞARAN, Muzaffer ÇOLAKOĞLU

**OP439.** Do Knee Muscular Activations Change According to Different Soccer Kick Techniques?

Ali Onur CERRAH, Abdullah Ruhi SOYLU, Adrian LEES, Hayri ERTAN

#### Recreation /Session 1/ Alaaddin Hall/ 16.30-18.00

Chair: Dr. S. Cem DINC

**OP 115**. Use of Trans-Contextual Model-Based Intervention in Developing Leisure-Time Physical Activity Behavior of University Students

Mine MUFTULER, Mustafa Levent INCE

**OP 117.** The Impact of Psychological Well-Being on Leisure Negotiation of University Students Tennur YERLISU LAPA

**OP 253.** The Effects of Recreative Cycling Motivation to Subjective Vitality

# Caner CETİNKAYA, Ipek AYDIN, Ozkan TUTUNCU

**OP 318.** Development of Leisure Education Scale: Pilot Study

Süleyman MUNUSTURLAR, Coskun BAYRAK

OP 331. The Relationship between Time Management and Stress among Physical Education and Sport School Students

Cagdas CAZ, Volkan AYDOGDU, H.Mehmet TUNCKOL, Erman ONCU

**OP488**. Differences in the Perception of Constraints and Motives on Leisure Time Exercise Participation Esra EMIR, Bülent GURBUZ, Erman ONCU

# Physical Education and Sport/Session 2/ Karatay Hall/16.30-18.00

Chair: Dr. M. Levent İNCE

OP377. Level of Tendency Towards Academic Misconduct of The Students of The Faculty of Sports Sciences Oğuz ÖZBEK, Senem ÇEYİZ

**OP471.** Examination of Validity and Reliability of Basic Motor Skill Test Battery on Autistic People Gamze BEYAZOĞLU, Engin UYSAL, Fatih BEKTAŞ

OP667. The effects of Physical Activity cards on Physical Activity levels of Elementary School Students in **Physical Education Lessons** 

Salih Gökhan IREZ, Metin YAMAN, Gönül BABAYIGIT IREZ, Sinan BÖLÜKBAŞ

**OP699.** Effect of Balance of 3 Months Training Program in Children with Down Syndrome

Asiye Filiz ÇAMLIGÜNEY, Yaşar TATAR, Selda UZUN, Nusret RAMAZANOĞLU, Sevinç KARABÜRK, Verda AKYÜZ

OP706. Effects of Everyone CAN Programme on motor skills and social connections of mentally disabled students

Yeşim GÖKGÖZ, Mehmet Ata ÖZTÜRK

# Psycho-Social Areas in Sport /Session 2/Selçuklu Hall/ 16.30-18.00

Chair: Dr. Hülya AŞÇI

**OP48.**The Effects of The Ancient Anatolian Cultures to Ancient Greek Sports

Ayda ARPAK KAYA, Nurullah CANDAN

**OP69.** Lady' or 'Woman'? Media reflections of the debate regarding gender-specific Turkish words Pınar ARPINAR AVŞAR, Serkan GİRGİN, Nefise BULGU

**OP74.** Healthy Lifestyle Behaviours, Social Appereance Anxiety and Certain Factors Preventing Non-Working Women from Participating to The Physical Activity

Zekai PEHLİVAN, Gizem ÖZTAŞ, Elif Nilay ADA

**OP124.** The Relationship Between Leadership Style and Competitive Anxiety of Female Athletes Vahid MOGHADDAM, Amir MOGHADDAM, Amin AZİMKHANİ

**OP159.** Does The Sex Composition of Exercise Setting Affect Psychological Characteristics of Female Exercise Participants?

Safter ELMAS, Aydan GÖZMEN, Cengiz KARAGÖZOĞLU, F. Hülya AŞÇI

**OP676.** The alienation of female athletes

Neslihan FİLİZ

#### November 7, 2014 Friday/Oral Presentations

# Movement and Training Sciences /Session 4/ Hall B/ 18.00-19.30

Chair: Dr. Ayşe KİN İŞLER

OP6. The Effect of Two Different 8-Week Walking Programs on Endoplasmic Reticulum Stress Markers and Insulin Resistance in Pre-Menopausal Women

Yeliz DOĞRU, Gürbüz BÜYÜKYAZI, Cevval ULMAN, Fatma TANELI, Hakan TIKIZ, Mehmet GÖRAL, Hasan ESEN

OP211. The Effects of High Intensity Interval Training on the Peak Oxygen Uptake and Resting Metabolic Rate in Obese Women

Funda COSKUN, C. Çağlar BILDIRCIN, Çiğdem ÖZDEMIR, Özgür GÜNAŞTI, Kerem Tuncay ÖZGÜNEN, Sanlı Sadi KURDAK

OP245. Relationship of Isokinetic Hamstrings-to-Quadriceps Peak Torque Ratio with Vertical Jump and Speed Performance in Soccer Players

Zait Burak AKTUĞ, Erbil HARBİLİ, Sultan HARBİLİ

**OP319.** Effects of Menstrual Cycle on Running Economy: Caloric Evaluation

Bircan AKDOĞAN, Tahir HAZIR

OP364. Exercise-Intensity at Peak Stroke Volume versus VO2max and Short versus Long Intervals May Be More Efficient to Yield Greater Time Spent at High Stroke Volume with Less Physiological Stress

Muzaffer ÇOLAKOĞLU, Özgür ÖZKAYA, Görkem Aybars BALCI, Bülent YAPICIOĞLU

**OP618.** Investigating Effects of Aerobic Exercise and Combined Exercise Programmes on Body Composition and Resting Metabolic Rate

Kübra ALTUNSOY, Yılmaz UÇAN

Sport and Health Sciences/Session 2/Alaaddin Hall/ 18.00-19.30

Chair: Dr. Mitat KOZ

**OP154.** Effects of Creatine Supplementation and ResistanceTraining on Muscular Strength and Body Composition in Collegiate Athletes

Amin AZIMKHANI, Yaser GARAZHIAN, Amir MOGHADDAM, Sadegh ABBASIYAN, Zahra SAYEVAND

**OP284.**The Comparison of Exercise Training and Methadone Supplement on Selected Indexes in Man Subjects Amin AZIMKHANI, Sadegh ABBASIAN, Seyyed Reza ATTARZADEH, Samane ABBASIAN

**OP351.**The Morphometric Effects of Nandrolone Deconate Used as Doping Agent Treatment on The Adrenal Zones of Male and Female Rats

Gökhan CÜCE, Erdal TAŞGIN, Sadullah BAHAR, Sefa LÖK

**OP496.** Effect of Acute Food and Fluid Intake on Dxa Body Composition Measurement

<u>Ulviye UĞUR</u>, Latife HASGÜL, Nehir TUNA, Ayça TURAN, Süleyman BULUT, Hüsrev TURNAGÖL

**OP650.** Evaulation of Fluid Consumption and Body Composition in Adults

Rüveyda Esra ERÇİM, Süleyman BULUT, Hüsrev TURNAGÖL

Psycho-Social Areas in Sport /Session 3/Karatay Hall/ 18.00-19.30

Chair: Dr. Ziya KORUÇ

**OP398.** Investigation of Exercise Reasons, Barriers and Life Satisfaction of Female Staff in Ordu University according to Several Variables

Gözde ERSÖZ, Hasan SÖZEN, Burkay CEVAHİRCİOĞLU

**OP403.** Comparision of Overweight and Slim Women's Body Perceptions Based on Exercise Participation Ömür AKKUŞ, Nihan ARSAN, Ziya KORUÇ

**OP440.** Examination of Sportspersonship Orientation and Empathic Skills of Young Children in Terms of Gender

Gülfem SEZEN BALÇIKANLI

**OP610.** Women boxers: Keeping the gloves on in and out of the boxing ring

Esra EMİR, Mustafa Şahin KARAÇAM, Canan KOCA

**OP646.** Investigation of Risk Factors for the Female Athlete Triad with Psychological Dimension in Athletes and Non-athletes

<u>Pınar ÖZTÜRK.</u> Yasemin GÜZEL, Tuğba Nilay GÜNGÖR, Ş. Nazan KOŞAR, Canan KOCA

**OP652.** Do Parental Attitudes of Basketball Coaches Effect to Their Perception of Leadership and Life Satisfaction?

**Turhan TOROS** 

Sports Management/Session 1/ Selçuklu Hall/ 18.00-19.30

Chair: Dr. Gazanfer DOĞU

**OP22.** Content Analysis of Official Twitter Account of under-20 Football World Cup

Levent ATALI, Burak GÜRER

**OP131.** Exploring the Opinion of Football Supporters towards Violence in Football

Melih Nuri SALMAN, Bilgehan COSKUNER

**OP162.** Reflections: Organizational Change Initiatives in Sports Clubs and Interaction With Chaos Selçuk ACIKGÖZ

**OP188.** Corporate Social Responsibility at Corporate Football Clubs

Burçak AKANSEL

**OP514.** Examining the Occupational Exhaustion and The Organizational Commitment of Football Coaches Yeliz ŞİRİN, Pervin BİLİR, Levent SANGUN, Günseli ÖZ

**OP664.** Investigating Organizational Justice Perceptions of Professional Footballers from Their Demographic Characteristic's Point of View

Hayri AYDOĞAN

November 8, 2014 Saturday/Oral Presentations

Movement and Training Sciences /Session 5/Hall B/ 08.30-10.00

Chair: Dr. Mehmet GÜNAY

**OP146.** Tolerance to Electrical Muscle Stimulation

Celil KAÇOĞLU, Mehmet KALE

**OP259.** Relationship Between Agility and Sprint, Power and Strength in Young Football Players F. Murat ÖZDEMIR, Atakan YILMAZ, Aydan AYTAR, Ayşe KİN-İŞLER

**OP270.** Importance of Vibration as Non-Invasive Method on Activation of Different Muscle Fiber Types <a href="Deniz SİMSEK">Deniz SİMSEK</a>

**OP276.** Proposal of a New Equation to Calculate Highly Reliable Fatigue Index in Wingate All-out Test <a href="Ekim PEKÜNLÜ">Ekim PEKÜNLÜ</a>, Ozgur OZKAYA, Bulent YAPICIOGLU

**OP625.** Treadmill Protocols with Short Duration and Abrupt Increase in Speed are More Effective in Determining VO2max: A New Approach

Ayhan Taner ERDOĞAN, Gökhan UMUTLU, Uğur CAN

**OP627.** The Relationship between Red Blood Cell Distribution Width and VO2max in Athletes Ayhan Taner ERDOĞAN

**OP688.** Effects of Cold Ambient on Self-Selected Cadence and Efficiency

Yasin YÜZBAŞIOĞLU, Görkem Aybars BALCI, Muzaffer ÇOLAKOĞLU

Physical Education and Sport /Session 3/Selçuklu Hall/ 08.30-10.00

Chair: Dr. A. Ferda GÜRSEL

**OP139.** Determination of the Views of Student, Parent and Physical Education Teachers Regarding TOP Cards Zekai USLUOĞLU, A. Dilşad MİRZEOĞLU

**OP240.** The Examination of the Occupational Efficiency of Teacher Candidates and Practices Teachers who Attend in the Course of Teaching Practice

Aynur YILMAZ, Sevinç NAMLI

**OP357.** Investigation of The Teaching Experience Course Effects on The Teacher Competences Biray KÖÇEN, <u>Murat KANGALGİL</u>, Fatih ÖZGÜL

**OP490.** The Effects of Direct Teaching Model In Chess Teaching on Combination Solving Skills Figen ALTAY, Kübra ÖZTÜRK

**OP531.** The Study of Candidate Teachers' Views on The Use of Inclusion Style In Physical Education Classes Hidayet Suha YÜKSEL, Ferda GÜRSEL

**OP686.** Comparison of Some Blood Parameters of Children With Cerebral Palsy Taking Treadmill Exercise Nazmi SARITAS, Hanife ABAKAY, Betül COŞKUN, Mustafa KARAKUŞ

Physical Education and Sport /Session 4/Alaaddin Hall/ 08.30-10.00

Chair: Dr. A. Leyla SARAÇ

**OP121.** The Comparison Effect of Subjects Oriented and Coach Oriented Feedback on Performance and Learning a Movement Task in Children

Amir MOGHADDAM, Javad FOOLADİAN, Vahid MOGHADDAM, Amin AZİMKHANİ

**OP250.** The Study of High School Students' Empathetic Tendencies with respect to Their Sporting Habits <u>Gökhan BAYRAKTAR</u>, Erdoğan TOZOĞLU, M. Ertuğrul ÖZTÜRK, Öner GÜLBAHÇE

**OP262.** The Relationship between Critical Thinking and Empathic Tendency: The Example of Preservice Physical Education Teachers

Ezel Nur KORUR, Erman ÖNCÜ, Sonnur KÜÇÜK KILIÇ

OP263. Lifelong Learning Tendencies of Physical Education and Sport School Students

Volkan AYDOĞDU, Ezel Nur KORUR, Erman ÖNCÜ, H.Mehmet TUNÇKOL

**OP273.** The Investigation of the Relationship between Self Esteem and Attitudes Towards Cheating of the Physical Education Prospective Teachers' (CBU, PES Teachers')

Mümine SOYTÜRK, Özden TEPEKÖYLÜ ÖZTÜRK, Erdoğan TOPUZ, Halil YETİM

**OP350.** Learning Styles of Preservice Physical Education Teachers According to Kolb's Model of Learning Styles

Ceyhun ALEMDAĞ, Erman ÖNCÜ

Sport and Health Sciences /Session 3/Karatay Hall/ 08.30-10.00

Chair: Dr. Gülfem ERSÖZ

**OP282.**The Relationship Between Physiological Characteristics in Elite FemaleYouth Soccer Kemal IDRIZOVIĆ

**OP409.** The Effect of Exercise Training on Pain Threshold, Plasma and Anterior Cingulate Cortex Beta Endorphin Concentrations in Rats Under High Fat Diet-Induced Obesity: A microdialysis study Mehmet SEYRAN, Aliye GÜNDOĞDU, Y. Gül ÖZKAYA

**OP608.** Physical Fitness Measurements Create Awareness About Physical Activity and Healthy Living <u>Hasan GÖKTEN</u>, Ali Cenk TORTUM, Nalan TEPE GÖKÇE

**OP616.** Determination of Somatotype Features and Differences Between The Dominant-Nondominant Hand Grip Strengths of Elite Female Fencers

Defne ÖCAL KAPLAN, Bilgehan BAYDİL, Ahmet DUVAN

OP682. Physical Activity Level and Decisional Balance Perceptions for Exercise in University Students

Ayda KARACA, Emine ÇAĞLAR, Gökhan DELİCEOĞLU, Naile BİLGİLİ

**OP707.** Physical Activity and Body Composition in Adolescent Girls

Yasemin GÜZEL, Nilay Tuğba GÜNGÖR, Pınar ÖZTÜRK, Canan KOCA, Şükran Nazan KOŞAR

Psycho-Social Areas in Sport /Session 4/Sems Hall/ 08.30-10.00

Chair: Dr. Canan KOCA ARITAN

OP36. Rehabilitation on Athletes Who Was Exposed to Sport Injury: Focus Group Study

Nalan Filiz AKSAKAL, Tuba SEVİL, İzzet KIRKAYA

**OP122.** The Effects of 8 Weeks Yoga Exercises on Female Students' Body Awareness

Amir MOGHADDAM, Amin AZİMKHANİ

**OP244.** The Effect of Regular Physical Exercise on Life Satisfaction and Hopes of the Breast Cancer Women in Remission

Faik ARDAHAN, Seda GENÇ, Asiye Hande ULUDAĞ

**OP464.** Psychological Changes in Athletes During Injury and After Treatment

Zeynep AYDOĞAN, Perican KORUÇ BAYAR

**OP569.** Effects of 6 weeks Psychological Skill Training on Team Cohesion, Self-Confidence & Anxiety: A case of youth basketball players

Bülent Okan MİÇOOĞULLARI, Sadettin KIRAZCI, Fevziye Hülya AŞÇI

**OP373.** The Effects of 10 weeks of Imagery and Concentration Exercises on Visual Focus in Basketball Players

Ferudun DORAK, Nilgün VURGUN, S.Sevil ULUDAĞ, Yasin YÜZBAŞIOĞLU, Ercan ATEŞ

# November 8, 2014 Saturday/Oral Presentations

Sports Management /Session 2/Hall B/ 10.15-11.45

Chair: Dr. Dilşat ÇOKNAZ

**OP34.** Verbal State of Football: TV Programs

Selami ÖZSOY

**OP346.** Risk Management in Sports: A Research on The Risk Assessment of The Sportsmen In Turkcell Super League

Halil Orbay COBANOĞLU, Güven SEVİL

**OP358.** Point of view of the newpapers about the situation occured during the Match-fixing period : content analysis

Gökhan DELİCEOĞLU, Ramazan ÜNVER

**OP443.** Consumer Based Brand Equity on Tracksuit Brands

Yavuz YILDIZ, Alper KİNDEN

**OP475.** The Relationship between the Fan Identification Levels and Their Attendance to Sport Yavuz YILDIZ, Armağan YALIRGAV

**OP656.** The Impact of Globalization In Football: The Laws of The Game of Football In The Road Technology Lale ORTA, Murat Yalçın BEŞIKTAŞ

Physical Education and Sport /Session 5/Selçuklu Hall/ 10.15-11.45

Chair: Dr. Mehmet GÜLLÜ

**OP58.** An Examination of the Classroom Teachers' Attitudes and Self-Efficacy Perceptions towards Physical Education Course

Sonnur KÜÇÜK KILIÇ, İbrahim AYDIN, Erman ÖNCÜ, H.Mehmet TUNÇKOL

**OP204.** The Investigation of The Physical Education Senior Teacher Candidates' Attitudes Directed to The Profession in terms of Some Variables

Başak EROĞLU, Umut SONBAHAR, Arif Kaan EROĞLU

**OP352.** Students and Parents' Attitudes Towards Physical Education Course in Primary Schools Arif Serkan YALDIZ, <u>Oğuz ÖZBEK</u>

OP390. The Examination of Work Life Quality of Physical Education Teacher

Mümine SOYTÜRK, Özden TEPEKÖYLÜ ÖZTÜRK

**OP564.** Examining the Relationship between the Attitudes of Teacher Candidates of Physical Education towards Teaching Profession and Their Levels of Occupational Anxiety

A.Meliha CANPOLAT, Olcay KİREMİTCİ, Lale YILDIZ

**OP620.** Developing an Attitude Scale in Physical Education Lesson for School Administrators Varol TUTAL, Ebubekir AKSAY, Mehmet EFE

Recreation /Session 2/Alaaddin Hall/ 10.15-11.45

Chair: Dr. Erdal Zorba

**OP62.** Evaluation of Perceived Freedom in Leisure and Life Satisfaction of Individuals Attending Fitness

Center over Different Variables

<u>Beyza Merve AKGUL</u>, Merve KARAMAN, Tebessüm AYYILDIZ, Senol GORAL, Aytekin Hamdi BASKAN, Ezgi ERTÜZÜN

**OP225.** The Perception of Parents Whose Children Aged 3-6 Staying in University or State Hospitals of Hospital Play Rooms

Süleyman CAN, Erdil DURUKAN, Nurdan IPEK, Rukiye CETİN

**OP348.** An Examination of Leisure Attitude Among Adolescents

Sabri KAYA, Halil SAROL, Emanuele ISIDORI

**OP568**. Determination of the Expectation Levels of Participants who Prefer Volleyball Branch Within Sport Project in Campus

<u>Yüksel SAVUCU</u>, Mustafa KARADAG, Fethi YILDIRIM, Yonca Süreyya BICER, Hüseyin Cagdas BATMAZ

# Psycho-Social Areas in Sport /Session 5/Karatay Hall/ 10.15-11.45

Chair: Dr. Nefise BULGU

**OP158.** Investigation of Changes in Official Game Rules of Volleyball Using the Method of Document Analysis

Eren ULUÖZ, Ismail KALLECİ, Dilek SEVİMLİ

**OP191.** Investigation of Coach Behaviours and Athletes' Experiences in Two Different Youth Basketball Context

Ahmet YAPAR, Mustafa Levent İNCE

**OP342.** Sports as a Tool of Diplomacy: The Example of Naim Süleymanoğlu Edip ÖNCÜ

**OP481.** A Social Group Formed by the Industrial Football: The Customer Spectator Fatih GÜR, Savaş ÇAĞLAYAN, Savaş DUMAN

**OP499.** 100 Years Ago, Physical Education Teaching: A Sample of Lesson Plan Sabri ÖZCAKIR

**OP505.** Critical Approach: Football and Football Media as a Culture Industry Product Selami ÖZSOY

**OP596.** The journey of changing intergenerational physical activity from past to the future: Grandchildren, mothers and grandmothers

Pınar ÖZTÜRK, Canan KOCA

# Psycho-Social Areas in Sport /Session 6/Sems Hall / 10.15-11.45

Chair: Dr. Atilla ERDEMLİ

**OP189.** Investigation About The Effects Of Sports Trainer Changing At Half-Season Onto Footballers': A Qualitative Research

Pınar GÜZEL, Zevnep ONAĞ, Fethiye BARUTÇU

**OP 196.** Validity and Reliability Study The Scale of Participation in Extreme Sport Kerem Yıldırım ŞİMŞEK

**OP236.** Gendered Space; Recreation and Women

Feyza Meryem KARA

OP658. Reliability and Validity of New Version of Sports Imagery Ability Questionnaire

Esen KIZILDAĞ KALE, Ünsal YETİM

**OP636.** The Effect of Personality and Emotional Intelligence on Athletes

Şenol GÜVEN, Serdar TOK, Çetin YAMAN, Nigar YAMAN

**OP685.** The Effect of Imagery Interventions on Imagery Ability In Elite Athletes

Esen KIZILDAĞ KALE, Ünsal YETİM

# November 8, 2014 Saturday/Oral Presentations

# Sport and Health Sciences /Session 4/Alaaadin Hall/ 15.00-16.30

Chair: Dr. Aysel PEHLİVAN

**OP251.** Determination and Comparision of Adult Sprinters and Distance Runners' Nutrition Knowledge Murat BIYIKLI, Aysel PEHLİVAN

**OP337.** Effect of Single-highdose Nandrolone Used as Doping Agent Plasma Corticosterone Concentration in Rats

Erdal TAŞGIN, Hale ERGİN, Seyfullah HALİLOĞLU, Şerife Kezban DİLBER

**OP469.** Comparison of Eye Movement Parameters of Table – Tennis Players with Non-Athletes Reza BEHDARİ, Erdal ZORBA, Mehmet GÖKTEPE, Recep SOSLU, Şakir BEZCİ

OP553. Effect of Body Glycogen Stores on Substrate Utilization During Endurance Exercise

Süleyman BULUT, Hüsrev TURNAGÖL

**OP634.** Effects of Mouth Rinsing with Different Concentrations of Carbohydrate Solutions on Endurance Performance

<u>Tuğba Nilay GÜNGÖR</u>, Hüsrev TURNAGÖL, Şükran Nazan KOŞAR, Süleyman BULUT, Yasemin GÜZEL, Tahir HAZIR

OP687. Evaluation of Low Back Pain and Biering-Sorensen Test Scores in Field Hockey Players

Mustafa GÜMÜŞ, <u>Tevfik Cem AKALIN</u>, Hüseyin Hakan KUDAK, Resul ÇEKİN, Mustafa Ertuğrul ÇIPLAK, Bilal EMEKTAR, Geylan BOSTAN

Sport Management /Session 3/Karatay Hall/ 15.00-16.30

Chair: Dr. Müberra CELEBİ

**OP30.** An Investigation on Sports Activities and Teachers' Job Satisfaction: Batman Province Sample BurakGÜRER, Mehmet Emin YILDIZ, Melike ESENTAŞ

**OP67.** The Effect of Organizational Communication on Organizational Commitment for The Academics who Work for the Faculties of Sports Education

Sevim GÜLLÜ, FatihYENEL

**OP114.** The Examination of Critical Thinking Levels of The Physical Education and Sports High School Students in Terms of Various Demographic Characters

T.Osman MUTLU, Ahmet Yavuz KARAFIL

**OP144.** Identifying Secondary School Students' Participation Levels in Sports (Erzurum Sample) Yeşim SONGÜN, Dursun KATKAT, Orcan MIZRAK

**OP447.** Evaluation of The Physical Activity Habits of Academic Staff Employed to Work on Universities Behlül ÖZDEDEOĞLU, Hakan SUNAY

**OP689.** Examining University Student's Levels of Work Volition

Volkan UNUTMAZ, R. Timuçin GENÇER

Recreation /Session 3/Sems Hall/ 15.00-16.30

Chair: Dr. Bülent Gürbüz

**OP 168.** The Analysis of Physical Education and Sports Teachers' Recreation Habits (Istanbul-Sariyer Example)

Adem PALA, Mirac YILMAZ, Mehmet KARGUN

**OP 255.** The Effects of Sport Motivation Factors to Service Quality Perception

<u>Ipek AYDIN</u>, Ozkan TUTUNCU

**OP 340**. Examination of The Teachers Free Time Options

Tugba YILMAZ, Betül BAYAZIT, Sebnem TELCI, Hakan AKDENIZ

**OP 359**. Investigation of The Relationship Between The Factors That Affect Life Quality and Leisure Preference Among High School Students

Utku ISIK, Duygu HARMANDAR DEMIREL, Sinan BASTACI, Emre DURGUN

**OP 389.** Reliability and Validity Study of the Observed and Realized Changes by Caregivers in Applied Adjuvant Sports Therapy for Breast Cancer Women's Life and Caregivers Life, Comparison the Changes with Respect to Some Demographics Variable: Antalya Case

Faik ARDAHAN, A. Hande ULUDAG

# November 8, 2014 Saturday/Oral Presentations

Movement and Training Sciences /Session 6/Alaaadin Hall/ 16.30-18.00

Chair: Dr. Muzaffer ÇOLAKOĞLU

**OP194.** Effects of Swimming Training Carried Out at Different Altitudes in Elite Swimmers

Erkan GÜNAY, Bekir ÇOKSEVIM, Cem Şeref BEDIZ, Nazmi SARITAS

**OP320.** The Effects on Some Motor Skills of Physical Education and Sports School Students of Plyometric Training

<u>Ercüment ERDOĞAN</u>, Alparslan INCE, Özgür DINÇER, Hasan SÖZEN, Burkay CEVAHIRCIOĞLU, Erdal ARI

**OP323.** Some of the Lower Extremity Strength Training and Technical Parameter Soft Motor on Male Soccer Players During Preparation

İlyas ÖZDEMIR, Adem CIVAN

**OP437.** Investigation of H Reflex and Recurrent Inhibition at the Flexor Carpi Radialis Muscle in Healthy Subjects

Gözde KOÇ, K.Alparslan ERMAN, Hilmi UYSAL

 $\mbox{OP622.}$  Determination of  $VO_2$ max and  $vVO_2$ max Values in Different Sport and Its Relation to Tlim Duration <u>Gökhan UMUTLU</u>, Ayhan Taner ERDOĞAN, Uğur CAN

**OP674.** Effects of Electromyostimulation Training to the Muscle Strength, Sprint and Balance

Mehmet KALE, Barış GÜROL

Movement and Training Sciences /Session 7/Karatay Hall/ 16.30-18.00

Chair: Dr. Mehmet KUTLU

**OP39.** The Relative Age Effect in Turkish Soccer

<u>Olcay MÜLAZIMOĞLU</u>, Mehmet BAYANSALDUZ, Kerimhan KAYNAK, Hacer Dilek MÜLAZIMOĞLU

**OP123.** Comparing the Effect of Aerobic and Weight Training Exercises on Mental

Vahid MOGHADDAM, Amir MOGHADDAM, Amin AZIMKHA

**OP299.** Effects of the Changes, Due to Swimming, in the Body Water Balance on Swimming Performance Burcu ERTAS DÖLEK, Ibrahim YILDIRAN, Mitat KOZ

**OP416.** Investigation of Shooting Hit Rate and Shooting Speed in 17 Age Group Handball Players Abdurrahman ERSOY, İpek EROĞLU KOLAYİŞ

**OP422.** Investigation the Effects of Elastic Band and Medicine Ball Exercises on Strength Development on 12-14 Ages Volleyball Players

Beyza SIMSEK, Berk ÇANAKCI

**OP426.** Decreased Interlimb differences in Female Basketball Players

Selcuk AKPINAR

Sport Management /Session 4/Sems Hall/ 16.30-18.00

Chair: Dr. Tennur YERLİSU LAPA

**OP47.** The Measurement of Sport Service Quality For Municipalities As Local Government Units (Konya Case) Yusuf BARSBUĞA, Hayri DEMİR

OP233. A Study on Athletes' Attitudes towards Human Rights in Sports

Resat SADIK, Nevzat MİRZEOĞLU

**OP234.** The Developmental Process of the ASHRS

Reşat SADIK, Nevzat MİRZEOĞLU

**OP367.** Approaches of Sport Managers to the Promotion of Sport

Ferhat GÜNDOĞDU, Hakan SUNAY

**OP400.** Favoritism in Sports

İrem KAVASOĞLU, Uğur ÖZER, Fatih YENEL

**OP444.** Opinion of Public From Sports Services of Local Authorities

Yasin TEKIN, Oğuz ÖZBEK

Physical Education and Sport /Session 10/Alaaddin Hall/ 18.00-19.30

Chair: Dr. Sadettin Kirazcı

**OP424.** A Preliminary Validation of the Turkish Version of the Automatic Self-Talk Questionnaire for Physical Education

Elif Nilay ADA, Nikos ZOURBANOS, Athanasios PAPAIOANNOU, Zişan KAZAK ÇETİNKALP

**OP478.** From "Talked About" Ideas Towards "Actioned" Practices in Pedagogical Innovations Özlem ALAGÜL, Ferda GÜRSEL

**OP565.** The Relationship between Dispositional Flow, Motivational Climate, and Self-Talk in Physical Education Classes

Elif Nilay ADA, Nikos ZOURBANOS, Zişan KAZAK ÇETİNKALP, Athanasios PAPAIOANNOU

**OP570.** The Draw A Physical Education Lesson

Cenk TEMEL, Mehmet GÜLLÜ

**OP581.** A Digital Movement in the World of Inactive Children: The Effects of Active Video Games on Promoting Physical Activity

<u>Dilşad ÇOKNAZ</u>, Ayşe Dilşad MİRZEOĞLU, Seval ALKOY, Hakkı ÇOKNAZ, Halil İbrahim ATASOY, Kemal GÖRAL

**OP582.** Through the Eyes of the Students: Physical Education and Sport Course and PES Teacher Gülsen ÖZCAN, Ayşe Dilşad MİRZEOĞLU, Dilşad ÇOKNAZ

# November 9, 2014 Sunday/Oral Presentations

Physical Education and Sport /Session 6/Hall B/ 08.45-10.15

Chair: Dr. Murat KANGALGİL

**OP239.** The investigation of Gifted Students' Perceptions about Concepts like "Physical Education Course and Physical Education Teacher" through Drawing-writting Methodology

Özbay GÜVEN, Aynur YILMAZ

**OP385.** The Metaphorical Perceptions of University Students Studying In A Sports Sciences Department About The School Concept

Fatih BEKTAŞ, İdris YILMAZ, Akın ÇELİK, Sabiha KAYA

**OP518.** Selected Skills Training Area Vocational Education Examination Results of Inventigation of Physical Education Music and Art Teachers Epistemological Belifs

Osman GÖDE, Gülen VURAL, Yakup TOPCAN, Tevfik AKOL, Cüneyt DEV

**OP544.** The Sports Thesis in Turkey, Their Investigations of Field, Method and Analysis Techniques Cenk TEMEL, Mehmet KARTAL, Zekai PEHLİVAN, Aysel NAMLI

**OP615.** Perceptions for Professional Competence of The Physical Education Teachers

Faruk AKÇINAR, Mehmet GÜLLÜ, Cenk TEMEL

Physical Education and Sport /Session 7/Selçuklu Hall/ 08.45-10.15

Chair: Dr. A. Dilsad MİRZEOĞLU

**OP106.** Attitudes and Thoughts of the Students at the Department of Physical Education and Sports to the Use of Technology

Kurtuluş ÖZLÜ, Şule KIRBAŞ, Sebiha GÖLÜNÜK

**OP192.** Attidudes of Physical Education Teachers Related to the Education Philosophy Prefences and Technology

Anıl TÜRKELİ, Ömer ŞENEL

**OP366.** Examination of Women Health-Related Fitness Program Participants' Perceived Autonomy Support and Basic Psychological Needs in Exercise at a University Setting

Shabnam MEHRTASH, Mustafa levent İNCE

**OP418.** Restructuring School Experience Course Materials by Using Social-Ecological Model Framework Deniz HÜNÜK, Gökçe ERTURAN-İLKER, Osman GÖDE

**OP573.** A Study Upon the Expectations and the Reasons of Athletes to Start the Gym Participating in European Cross Country Championships

Metin BAYRAM

Sport Management /Session 5/Alaaddin Hall/ 08.45-10.15

Chair: Dr. S. Murat YILDIZ

**OP296.** Evaluate The Communication Skills of The Trainers at The Amateur Sport Clubs Nesil ÖZBAY, Asil ÖZBAY

**OP332.** Burnout and Executive Leadership Style Perceptions of Physical Education Teachers Volkan AYDOĞDU, Erman ÖNCÜ, <u>Sonnur KÜÇÜK KILIÇ</u>

**OP370.** Evaluation of Sport Foundation Manager's Leadership and Management Abilities

Veli Onur ÇELİK, <u>Sevda GÖKÇE</u>

OP453 The Administrative Difficulties Encountered in Search and Rescue Process and Lead

**OP453.** The Administrative Difficulties Encountered in Search and Rescue Process and Leadership Zühal KILINÇ, Burak GÜRER, Müberra ÇELEBI

Recreation /Session 4/Karatay Hall/ 08.45-10.15

Chair: Dr. Bülent GÜRBÜZ

**OP 280.** Health Beliefs of Men with regard to Recreation Activities Sportive

Ezgi ERTUZUN, Beyza Merve Akgül, Said BODUR, Suat KARAKUCUK

**OP 502**. Assessment of Nature Camp Activities of the Ministry of Youth and Sports as a Youth Activity Melike ESENTAS, Pinar GUZEL, Selhan OZBEY

**OP 520.** Leadership Behaviors of The Youth Camp Leaders, Perception by Participant Evaluation Cenk TEMEL, <u>Seckin DOGANER</u>, Aysel NAMLI, Velittin BALCI

**OP 521**. According to The Participants' Perceptions, Evaluation of Youth Camps in Turkey, As A Common Living Place

Cenk TEMEL, Aysel NAMLI, Seçkin DOGANER, Velittin BALCI

**OP 545.** The Determination of Constraints Associated with the University Students' Participation in Recreational Activities (A Sample of Selcuk University)

Mehmet ALTIN, Yusuf BARSBUGA

Psycho-Social Areas in Sport /Session 7/Sems Hall/ 08.45-10.15

Chair: Dr. Füsun ÖZTÜRK KUTER

**OP264.** To Examine Gender Differences in Personal and Social Responsibility of Secondary School Students Bülent AĞBUĞA, Şehmus ASLAN, Fatma AĞBUĞA

OP278. Perceived Teacher Feedback Scale: The Validity and Reliability Study

Feyza Meryem KARA, F. Zişan ÇETİNKALP, F. Hülya AŞÇI

**OP407.** The Relation Between Self-respect Levels and Life Quality Levels of Disabled and Able Bodied Tennis Sportsmen

Adem CİVAN

**OP414.** The Role of Passion in Prediction of Job Satisfaction and Life Satisfaction in Fitness Leders Selen KELECEK, Atahan ALTINTAŞ, Feyza Meryem KARA, F. Hülya AŞÇI

**OP479.** An Analysis of the Emotional Control Levels of the Students Studying at the Faculty of Sports Sciences Gül ÇAVUŞOĞLU, Bade YAMAK, <u>Saban ÜNVER</u>, Kezban KILIÇ

**OP560.** Research of Aggressive States of Student Athlete Participating Inter High School Competitions Halil İbrahim CAKIR, Mehmet ACET

# November 9, 2014 Sunday/Oral Presentations

#### Movement and Training Sciences /Session 8/Hall B/ 10.30-12.00

Chair: Dr. Yücel OCAK

**OP59.** Acute Residual Effects of Short and Long Duration Static Stretching on Counter Movement Jump Performances in Well-Trained Combat Athletes

<u>İsa SAĞIROĞLU</u>, Ekim PEKÜNLÜ, Cem KURT, İlbilge ÖZSU

**OP79.** Analysis of the Influence Regional (Core) Training Over Some Motor Skills of 18- Year-Old Soccer (Football) Players

Yakup Akif AFYON, Abdurrahman BOYACI

**OP391.** Effect of Acute Resistance Exercise on Appetite in Healthy Men

Seda ÖNER, Şerife ÖZEN, Burçin ÖLÇÜCÜ, Gül TİRYAKİ SÖNMEZ

**OP452.** Effects of 8 Weeks Slide Board Exercises on 100m Free Style Swimming Performances of 14-16 Aged Group Swimmers

Taha ÇETEOĞLU, Bergün MERIÇ BINGÜL, Menşure AYDIN, Çiğdem BULGAN

**OP459.** Ski and Elite Athlete Comparison of Bone Mineral Density

Recep SOSLU, Mehmet GÖKTEPE, Murat TAŞ, Öznur AKYÜZ, Dursun KATKAT

**OP461.** Elite Level Level Comparison of Heavy Metal in Ski and Athletes

Recep SOSLU, Mehmet GÖKTEPE, Murat TAŞ, Murat AKYÜZ, Öznur AKYÜZ,

Aziz GÜÇLÜÖVER

# Movement and Training Sciences /Session 9/Selçuklu Hall/10.30-12.00

# Chair: Dr. Yavuz TAŞKIRAN

**OP206.** Exercise Arterial Induced Hypoxemia in Elite Cross-country and Alpine Skiers During Maximal Exercise

Selcen KORKMAZ ERYILMAZ, Metin POLAT, Sami AYDOĞAN

OP536. The Effect of Acute Static Stretching on Concentric and Isometric Knee Strength

Zübeyde ASLANKESER, Serkan REVAN, Abdurrahim KAPLAN

**OP540.** Effect of High Intensity Interval Training on Body Composition and Agility Performance of Overweight Women

Abdorreza EGHBAL MOGHANLOU, Seyed Javad MIRGHANI, Mehdi SAID YOUSEFI

**OP555.** The Effect of Nutrional Habits on Growth Hormones in the Adeloscent Period of Ballet Students Yagmur ARINLI, Manolya AKIN, Seyit Ahmet UÇAKTÜRK, Mehmet Burak Yavuz ÇİMEN

**OP660.** Lower Extremity Isokinetic Strength in Weightlifters, Soccer and Basketball Players: Relationship Between Concentric Leg Strength and Anaerobic Power

Sultan HARBILI

**OP712.** The effects of two-week anaerobic training on VO<sub>2</sub>max

Zübeyde ASLANKESER

# Movement and Training Sciences /Session 10/Alaaddin Hall/ 10.30-12.00

# Chair: Dr. Ali Ahmet DOĞAN

**OP49.** The Physiological Profile and Performance Responses of Elite Male Tennis Players During Tennis Match <u>Bülent KİLİT</u>, Ömer ŞENEL, Erşan ARSLAN, Sema CAN, Mustafa BALABAN

**OP575.** Development of Regression Equations for Estimating Body Fat Percentage of Male Soccer Players <u>Hüseyin ASLAN</u>, Ümid KARLI, Alpay GÜVENÇ, Orhan Ahmet ŞENER, Caner AÇIKADA

**OP600.** Taekwon-Do Athletes Bone Mineral Density and Hypermobility

Manolya AKIN, Zahide KANTAR UZ

**OP605.** The Effect of Defensive Strategies on the Physiological Responses and Time Motion Characteristics in Small Sided Games

Hamit CIHAN

OP621. Effects of VO<sub>2</sub>max Test Duration and Initial Workloads on O<sub>2</sub> Consumption

Ramazan AYDINOGLU, Gorkem Aybars BALCI, Bulent YAPICIOGLU, Muzaffer COLAKOGLU, Ozgur OZKAYA

 $\mbox{OP623.}$  Evaluation of Plateau in  $\mbox{VO}_2$  and Its Retest Reliability in  $\mbox{VO}_2\mbox{max}$  Tests

Ramazan AYDINOGLU, Gorkem Aybars BALCI, Bulent YAPICIOGLU, Muzaffer COLAKOGLU, Ozgur OZKAYA

# Sport and Health Sciences /Session 5/Karatay Hall/ 10.30-12.00

# Chair: Dr. Nazan KOŞAR

**OP 51.** Evaluation of Physical Activity and Fitness Levels of 14-18 Age Group Girl and Boy Students Housing in Konya Orphanages

Musa UÇAR, İ.Bülent FİŞEKÇİOĞLU

**OP 281.** Relationship Between Physical Activity Levels and Physical Fitness of Young (15-17 ages)

Nesrin SAYIN, Adem CİVAN

**OP 317.** Physical Fitness Evaluation of TheTurkish Armed Forces

Yetkin Utku KAMUK, Kemal TAMER

**OP 328.** Relation of 2D:4D Ratio with Performance of Amateur Basketball Players

Dursun GÜLER, Burak ÖZDEMİR, Alican BOLAT, Görkem YÜCEGÖNÜL, Taylan ÖZDEMİR

**OP 482.** Investigating the Effects of Pilates Exercises on Body Composition and Energy Consumption Ayla Nese SOYKAN, First AKÇA, Mitat KOZ

**OP 534.** Effect of Aerobic-step and Plates Exercises on Body Composition, Blood Lipids and Blood Glucose in Middle-Aged Women

İlknur ÖZDEMİR, Sultan HARBİLİ

# Movement and Training Sciences /Session 11/Sems Hall/ 10.30-12.00

# Chair: Dr. Serdar ARITAN

**OP470.** The Effects of Intensive Exercise for Eight Weeks on Some Hormones in Basketballers

Recep SOSLU, Yıldırım KAYACAN, Hamit KAVURMACI, <u>Yücel MAKARACI</u>, Ali ÖZKAN, Ali Ahmet DOĞAN

**OP535.** Effect of Yo-Yo Test-Induced Fatigue on Biomechanics of Instep Kicking in Soccer Erbil HARBILI, Asım TUNCEL, Serdar ARITAN

**OP557.** The Effect of Preconditioning Strategies on Isokinetic Strength in Elite Kick Boxing Athletes Atakan YILMAZ, Veli Volkan GÜRSES, Mustafa GÜLŞEN, Mustafa Şakir AKGÜL

**OP665.** Relationship Between Isokinetic Leg Strength and Kinematics of the Snatch Lift in Elite Male Adolescent Weightlifters

Erbil HARBILI, Sultan HARBILI

**OP708.** Biomechanical Characteristics of Forward and Backward Giant Circles on High Bar Nihat ÖZGÖREN, Serdar ARITAN

# November 9, 2014 Sunday/Oral Presentations

# Psycho-Social Areas in Sport /Session 8/Hall A/ 14.30-16.00

#### Chair: Dr. Erman ÖNCÜ

**OP375.** Examining the Relationships of University Students' Ways of Coping With Stress, Life Satisfaction and Subjective Well-Being (Manisa Sample)

Murat ÖZŞAKER, Zeynep ONAĞ, Mesut LAÇİNKAYA, Ozan ARSLAN, Onur AKIN, Mücahit SÜLÜ

**OP388.** The effect of Anxiety Levels and Body Mass Indexes on the Shooting Skills of Police Vocational High School Students

Fatih KARAKAS, Soner ÇANKAYA, M. Yalçın TAŞMEKTEPLİĞİL, Musa ÇON

**OP405.** A Comparison of Levels of Quality of Life, Depression and Loneliness among Athletes with Different Levels of Training

Şaban ÜNVER, Tülin ATAN, Gül ÇAVUŞOĞLU, Vedat ERİM, Bade YAMAK

**OP487.** The Relationship between Self Esteem in Decision-Making and Decision Making Styles of the Climbers' Ages and Coping With Stress

Burak KURAL, Tekin ÇOLAKOĞLU, Suat KARAKÜÇÜK

**OP571.** Relationships Among Self Efficacy, Achievement Goals and Social Appearance Perceptions in University Basketball Players

Elif Nilay ADA, Fatma ÇEPİKKURT, Zişan KAZAK ÇETİNKALP, Aksel ÇELİK

# Psycho-Social Areas in Sport /Session 9/ Hall B/ 14.30-16.00

#### Chair: Dr. Erkut KONTER

**OP598.** The Attitudes of Athletes Towards Socially Perception Themselves in Sports: A Study for Scale Developing, Validity and Reliability

Ömer TEKÇE, Funda KOÇAK, Oğuz ÖZBEK

OP631. Effect of Coach Behaviors on Success of Deaf National U12 Basketball Teams

Berrak F. FIRAT, Deniz DURDUBAŞ, Ziya KORUÇ

**OP639.** Example of Intangible Cultural Heritage of Fair Play: Kırkpınar

Sevda KORKMAZ

**OP 272.** The Relationship Between Kick Boxers Perception of Coaching Behaviours and Athletes Achievement Motivation

İhsan SARI, Gamze DERYAHANOĞLU, Betül BAYAZIT, Rıdvan KIR

**OP 533.** Psychological and Physical Predictors of Social Physique Anxiety in Male and Female College Student Athletes

Murat SARIKABAK, Hasip CANA, Halil İbrahim GENÇ, İpek KOLAYİŞ, Serdar TOK

**OP 614.** Perfectionism and Performance Failure

Fatma CEPİKKURT, Elif Nilay DAŞDAN ADA, Esen KIZILDAĞ KALE, Funda COŞKUN

Physical Education and Sport /Session 8/Selcuklu Hall/ 14.30-16.00

Chair: Dr. Yunus ARSLAN

**OP197.** The Investigation of Physical Education, Music and Art Teachers' Communication Skills

Özden TEPEKÖYLÜ ÖZTÜRK, Mümine SOYTÜRK

**OP441.** Evaluation of Constructivist Approach Used in High School Physical Education Courses in terms of Gender

Zekeriya CELİK, Bülent AĞBUĞA

**OP489.** The Assesement of Rhythm Skills in Middle Schools Students'

Figen ALTAY, Suna EREL

Physical Education and Sport /Session 9/Alaaddin Hall/ 14.30-16.00

Chair: Dr. Zekai PEHLİVAN

**OP223.** Teaching Chess with Peer Education Model

<u>Umut ÜNER</u>, Nevin GÜNDÜZ

**OP530.** Opinions and Practices of The Instructors on Assessment and Evaluation

Hidayet Suha YÜKSEL, Nevin GÜNDÜZ

**OP593.** Turkish In-Service Physical Education Teachers' Perceptions of Measurement and Evaluation

Nurdan YAYKIN, Cevdet CENGİZ

**OP629.** Developing a Badminton Content Knowledge Test and Preliminary Findings on PETE Students

Erhan DEVRİLMEZ, Mustafa Levent İNCE

Sport Management /Session 6/Karatay Hall/ 14.30-16.00

Chair: Dr. Selhan ÖZBEY

**OP256.** Influence of Parents to Professional Development of Children

Erdoğan TOZOĞLU, Gökhan BAYRAKTAR

**OP298.** The Analysis of Turkey's Olympic Education Implementations According to Olympic Legacy and Candidature Process

Yeşim ALBAYRAK KURUOĞLU, <u>Hülya ÜNLÜ</u>

**OP330.** Alternative Women's World Games Against Olympic Gender Discrimination (1921-1934)

Ender ŞENEL, İbrahimYILDIRAN

**OP406.** Theory and Practice Meet in Sport Management: An Evaluation within the Framework of Field Experience

Dilşad ÇOKNAZ, Devrim BULUT

Movement and Training Sciences /Session 12/Sems Hall/ 14.30-16.00

Chair: Dr. Ahmet ALPTEKİN

**OP110.** The Effects of Acute Vibration Application on Visual Reaction Time for Fencers

Sercin KOSOVA, Mehmet İsmet TOK, Hikmet GÜMÜŞ, Merve KOCA

**OP216.** Effect of Aerobic Training on Fat Oxidation Rate During Acute Submaximal Exercise in Young Adults Şükrü Serdar BALCI, Hamdi PEPE, Serkan REVAN, <u>Şükran ARIKAN</u>, Hasan AKKUŞ, Firuze KURTOĞLU, Behiç SERPEK

**OP454.** Is Walk to Run Transition Speed Different for Athletes and Sedentary Individuals?

Ayhan Taner ERDOĞAN, Uğur DAL, Hüseyin BEYDAĞI

**OP538.** Recovery After Repeated Sprint Ability: Comparison of Trained and Untrained Individuals <a href="Sultan HARBILI">Sultan HARBILI</a>

**OP556.** The Effect of Training With Kangoo Jumps Shoes on the Balance, Leg Strength and Shots Ratio in Women Basketball Players

Manolya AKIN, Aşina DURMUŞ

**OP661.** Analysing of Relationship Between Apelin and Running Performances of Short, Middle and Long Distance Elite Male Runners

<u>Hüseyin Nasip ÖZALTAŞ</u>, Cengiz ARSLAN, Faruk AKÇINAR, Ibrahim KAPLAN, Ismail YILDIZ

# POSTER PRESENTATIONS

November 7, 2014 Friday/Poster Presentations

Movement and Training Sciences /Poster Session 1/Poster Hall / 12.00-12.30

Chair: Dr. Sükrü Serdar BALCI

**PP12.** Turkish National Ski Teams (Alpine and Nordic) of Their Anthropometric and Physiological Characteristics Comparison

Vahdet ALAEDDİNOĞLU, İsmail KAYA, Hüseyin EROĞLU, Sinan ÇEMLEK

**PP17.** The Comparison of the Children Group's Respiratory Parameters between 10 – 14 Age Who Engaged in the Sport of Swimming

Fatih ÖZGÜL, Murat ELİÖZ, Aynur OTAĞ

**PP28.** The Evaluation of Anaerobic Power Valus and Sprint Performances of Football Players Playing in Different Positions

Mehmet Yalçın TAŞMEKTEPLİĞİL, Oğuzhan ARSLAN, Egemen ERMİŞ, Hamza KÜÇÜK

PP41. Assessment of Irisin Levels in Sportive and Sedentary Men

Tuğba ARKAN, Aksel CELİK, Mehmet ÇALAN, Erkan GÜNAY, Dilek ÇIMRIN, Fırat BAYRAKTAR

PP42. Examination of Menstrual Phases on Athletic Performance in Female

Mine AKKUŞ, Muhsin HAZAR, Malik BEYLEROĞLU, Seda YALÇIN, Merve UCA

**PP43.** Analysis of the Home and Away Performance of a Team in Regional Basketball League Onur METİN, Kemal GÖRAL, Özcan SAYGIN

**PP54.** The Effects of 8-Week Body Weight Strength Training on 100 Meters Freestyle Swimming Performance of 11-12 Age Group Athletes.

Burçak KESKİN, Osman ATEŞ, Özge BENZER

PP56. The Analysis of Goals Scored in the 16-Round of 2014 FIFA World Cup

Erhan IŞIKDEMİR, Olcay MÜLAZIMOĞLU, Yakup Akif AFYON, Mehmet DALLI, Şenol YANAR

**PP73.** Relationship between Anaerobic Performance and Vertical Jump Performance in Adolescent Athletes Hayriye ÇAKIR ATABEK

**PP80.** Is There A Difference between Some Strength Parameters in 15 - 16 Years Old Boys? Sevda YURT, Özgür NALBANT

**PP91.** The Effect to Ball Speed of Muscle Activation during Basic Strokes of Tennis Players Ercüment ERDOĞAN, Seydi Ahmet AĞAOĞLU

**Movement and Training Sciences / Poster Session 2/ Poster Hall / 12.00-12.30** 

Chair: Dr. Zübeyde ASLANKESER

**PP103.** Physical, Anthropometric and Motoric Characteristics Examinations of 14–16 Age Male Volleyball Players

Ahmet Rahmi GÜNAY, Kadir GÖKDEMİR, Erkan GÜNAY, Mehmet DALLI

**PP105.** Acute Effects of Strength Practices in Different Densities on Hand Eye Coordination

K.Alparslan ERMAN, Asuman ŞAHAN, Cenk ÖZTÜRKER

**PP111.** The Effects of 6 Weeks Land and Resistance Training on Lower Limb Isokinetic Strength Performance and Swimming Performance of 13-16 Year Old Swimmers

Barış MADEN, Ayşegül YAPICI, Gülin FINDIKOĞLU, Muzaffer DOĞGÜN

PP112. The Technical Analysis of Goals Scored in the 2010 World Cup

Özcan GÜLER, Ayşegül YAPICI, Barış MADEN, Muzaffer DOĞGÜN

**PP140.** The Effects of Fatigue on Instep Kick Performance in Soccer

Bekir MEHTAP, Şükrü Serdar BALCI

**PP141.** Physiological Responses to Different Types Implemented of Endurance Training in Young Male Basketball Players

Wisam Zuhair Abduljabbar AL ABDILH, Seyfi SAVAŞ

**PP142.** Comparison of the Efficiency Ratings of The Turkish Women Basketball 2nd League Teams Barış GÜROL

**PP143.** How Does the Ground Reaction Force Affect the 6s Sprint Performance?

İzzet KIRKAYA, Barış GÜROL, İlker YILMAZ

**PP161.** Review of the Students' Anthropometric and Somatotype Structures

Onur BOZLAR, Vedat AYAN

**PP163.** The Study of the Somatotype Structures and the Performance Characteristics of Turkey's U15 Men's National Basketball Team Players.

Vedat AYAN, Emre EROL

**PP167.** Analyzing The 8-14 Aged Male Swimmers' Somatotype Structures and Horizontal Skipping Features. Nehir KAVI, Gamze BEYAZOĞLU, <u>Vedat AYAN</u>

# Psycho-Social Areas in Sport / Poster Session 1/ Poster Hall / 12.00-12.30

Chair: Dr. Erman ÖNCÜ

**PP 25.** The Examination of the State-Trait Anxiety Levels of Teakwondo players in terms of Different Variables Burçak KESKİN, Burcu GÜVENDİ, Aylın ÖZTÜRK

**PP 61.** Attitudes to Moral Decision-Making in Youth Sport Questionnaire 2 (AMDYSQ-2): Turkish Adaptation Study

Bahri GÜRPINAR

PP 63. Industrial Football and Advocacy: The Example of Kayseri Province

Ayhan DEVER, Ali ERKUL

**PP 66.** Sports Branches and Gender Effects on Level of Socialization

Tülin ATAN, Veysi ASLAN

**PP 70.** Review of Trait Anxiety Levels and Forms of Anger Expression in Trap Skeet Shooter Tamer KARADEMİR, Cihan GÜNEŞ, Meziyet TAŞÇI

**PP 101.** The Impact of the Exercise Habits in Old People on the Level of Timidity

Deniz Özge YÜCELOĞLU KESKİN, Murat ELİÖZ, Tülin ATAN

**PP 107.** The Role and Importance of Mass Media in Development of Fair Play Concept Kurtuluş ÖZLÜ, Şule KIRBAŞ

**PP 134.** Physical Education Teachers of the Humbly of Personal Development Initiative Taking Skills on Impact

Gülay Yasemin ALDEMİR, Ayhan BAYRAM, Senem ERGAN

**PP 147.** Balikesir University of Physical Education and Sports School Students of Different Sports Activity Monitoring Behavior

İlyas ÖZEN, Zekeriya GÖKTAŞ

PP 148. Physical Education Teachers of The Humbly of Self-Sabotage on Impact

Gülay Yasemin ALDEMİR, Esen KIZILDAĞ KALE, İlhan ADİLOĞULLARI

**PP 293.** Comparison of Turkish and Japanese Modernizations Through Sport Veli Ozan ÇAKIR

Physical Education and Sport / Poster Session 1/ Poster Hall / 12.00-12.30

Chair: Dr. Serkan Revan

**PP3.** Early Childhood Education Majors' Perceptions on Physical Education Irmak HÜRMERİÇ ALTUNSÖZ

**PP14.** Yüzüncü Yıl University A Study on The Relationship Between Attention Deficit Hyperactivity Disorder and The Academic Success and Some Parameters of The Students of The Physical Education Sports Teachers Department

Mustafa ATLI, Gökhan YAŞAR

**PP23.** Examination of Private and Public Middle School Students' Opinions about Physical Education Courses: A Constructivist Teaching Practices Study

Bülent AĞBUĞA, Sinem KADEM, Çağdaş MAVİOĞLU

**PP32.** Interpersonal Cognitive Distortions levels of the Physical Education Pre-service Teachers Filiz YAYLACI, Mert ÇEVİK

PP35. Examining Pre-Service Physical Education Teachers' Satisfaction: Vocational Personality Approach Ahmet Haktan SİVRİKAYA

**PP71.** The Comparison of Assertiveness Level of Physically Disabled Athletes Who Played in Different Sport Branches

Gonca İNCE

**PP72.** A Study on Sportspersonship Behavior of High School Students in Physical Education Course According to Some Variables

Yakup KOÇ, Mehmet GÜLLÜ

PP128. Examination of Physical Education Teacher Candidate's Attitudes towards Researches

Yaprak KALEMOĞLU VAROL, Hüseyin ÜNLÜ, Mustafa Kayıhan ERBAŞ

PP129. Basic Personality Characteristics of Physical Education Teachers

Mustafa Kayıhan ERBAŞ, Hüseyin ÜNLÜ, Yaprak KALEMOĞLU VAROL

**PP136.** The Views of Physical Education Teachers' About Training Programs of 4th and 5th Class Students in Primary Education. (A Sample of Kars, Ardahan and Iğdır)

Tarkan HAVADAR, Murat TAŞDAN

**PP183.** Cluster analysis and evaluation of teaching methods used by sports educators (the case of the province of Elazig)

Talha MURATHAN, Oktay KAYA, Fatih MURATHAN

Sport and Health Sciences / Poster Session 1/Poster Hall / 12.00-12.30

# Chair: Dr. Yeşim ALBAYRAK KURUOĞLU

**PP 57**. The Effect of Bovine Colostrum Usage on Serum Immunoglobulins and Protein Levels in Basketball Players

Ali Osman KIVRAK, Gürkan UÇAR

PP 75. Doping in Athletes is to Examine The Extent of The Factors That Lead to Routing

Mehmet Fatih E RÖZ, <u>Tahir KILIÇ</u>, Çetin ÖZDİLEK

PP 77. Average Body Height of Adolescents in Montenegro

Stevo POPOVIC, Dusko BJELICA, Rasid HADZIC

**PP 116.** The goal of this research is to investigate eating habits of the students at the school of physical education and sport of Balıkesir Universty

Erdil DURUKAN, İlvas ÖZEN

**PP 135**. An Examination of Nutritional Habits of Students Studying at Different Departments of Ondokuz Mayıs University

Egemen ERMİŞ, Erol DOĞAN, Necati Alp ERİLLİ, Arif SATICI

**PP 155.** Evaluation of the Nutrition Knowledge Level of Physical Education and Sport Department Students Mendane SAKA, Esra KÖSELER, Sinem METİN, <u>Aytekin Hamdi BAŞKAN</u>

**PP 157.** Measurement of Knowledge About Doping of Students Who Are Studying at School of Physical Education and Sports.

Tahir KILIÇ, Mert ÇAPHAN

**PP 173.** Weight Estimation from Left Foot Dimensions of West Anatolian Elite Young Male Football Players A preliminary study

Aksel ÇELİK

**PP 176.** The Prevalence of Obesity in Women Who Attend Sports Centers With The Examination of Healthy Lifestyle Behaviors

Talha MURATHAN, Ümit YETİŞ, Fatih MURATHAN, Metin KARAYOL, Kübra ÖZDEMİR

**PP 193.** Evaluation of Nutritional Knowledge and Habits of Female Handball Players Şule KIRBAŞ, Sedef KURT

Recreation / Poster Session 1/ Poster Hall / 12.00-12.30

Chair: Dr. Ezgi ERTUZUN

**PP 60.** The Comparison of Amateur and Professional Male Athlete Leisure Times and Non-Athletes Heidar SAJEDI

**PP 165.** Leisure Time Behavior in Different Cultures: "Armenian Sampling"

Aytekin Hamdi BASKAN, Merve KARAMAN, Suat KARAKUCUK

**PP 190.** Primary and Secondary Teachers's Awareness About The Consept of Recreation (Sample of Izmit county)

Canan ONER, Elif KARAGUN

PP 220. Examining of Potential of Sports Tourism in Antalya, Belek

Tahir KILIC, Abdullah ARISOY, Tuba DIK

**PP 235.** Examination of the Relationship Between Participation in Recreational Activities, Leisure Satisfaction, Psychological Well-Being and Life Satisfaction in University Students (Akdeniz University Example) Evren TERCAN

PP 294. Examination of Time Management Skills of University Students

Halil SAROL, Serkan KURTIPEK, Sabri KAYA, Hamdi Alper GUNGORMUS

**OP 312**. Life Satisfaction and Job Satisfaction: In Relation to Recreational Physical Activity Halil SAROL, İsmail AYDIN, Bülent GURBUZ, Zafer ÇİMEN

PP 353. Housewifes Sitting in Muğla Ula Habıts of Free Time Invastigation

Fahri AKCAKOYUN, Efecan TEZCAN, Vedat MUTLU

**PP 404.** Dance sport Ethic Codes: A Situation Analysis Study

Hüseyin CEVIK, Kerem Yıldırım ŞİMŞEK

PP 429. Examining Recreational Exercise Motivation Factors of Individuals at Sport Centers

Osman GUMUSGUL, Umit Doğan USTUN, Emine PINARBASI, Jale SOYLU

November 7, 2014 Friday/Poster Presentations

Movement and Training Sciences /Poster Session 3/Poster Hall / 15.15-15.45

Chair: Dr. Serkan REVAN

PP179. The Effects of Rhythmic Gymnastics Training on Blood Nitric Oxide Levels

Faruk TURGAY, <u>Pınar TATLIBAL</u>, Onur ORAL, Ali Rıza ŞİŞMAN

PP181. Is There a Relationship between Isokinetic Shoulder Strength and Proprioception of Overhead Athletes?

Özgür KOÇAK, Barış GÜROL, Erkan AKDOĞAN

**PP182.** Comparison of Anthropometric and Somatotype Characteroistics of Amateur and Professional Soccer Goalkeepers in Trabzon.

Yalçın İNAN, <u>Selami YÜKSEK</u>, Vedat AYAN

PP187. Effect of Ball Throw to the Target Drill on Tennis Performance Test

Asuman ŞAHAN, Alparslan ERMAN, Kıvanç KORKMAZ

PP195. The Comparison of Hypoalgesia Effects Due to Exercise Training in Especial Group

<u>Sadegh ABBASIAN</u>, Seyyed Reza ATTARZADEH, Amin AZIMKHANI, Nima GHARAHDAGHI, Samane ABBASIAN

**PP198.** Isokinetic Hamstrings: Ouadriceps Ratios in Volleyball Players

Ayşegül YAPICI, Muzaffer DOĞGÜN, Engin Güneş ATABAŞ

**PP199.** Velocity Differences of Throwing Taken From Different Positions in Water Polo and Their Correlation with Anthropometric Characteristics

Ayşegül YAPICI, Mehmet Zeki ÖZKOL, Bahtiyar ÖZÇALDIRAN, Metin ERGÜN

**PP200.** Evaluation of the Relationship between Isokinetic Strength and Field Performance in Professional Male Volleyball Players

Ayşegül YAPICI, Muzaffer DOĞGÜN

**PP203.** The Comparison of Some Motoric and Technical Characteristics between the Players of 12 Dev Adam Basketball School and the Players of Tofaş Basketball School (Sample in Van)

Yıldırım Gökhan GENCER, Mehmet Bülent ASMA

PP207. Evaluation of Anthropometric Characteristics of Turkish Canoe National Team Athletes

C. Çağlar BILDIRCIN, Funda COŞKUN, Çiğdem ÖZDEMİR, Özgür GÜNAŞTI, Kerem Tuncay ÖZGÜNEN, Sanlı Sadi KURDAK

# Movement and Training Sciences / Poster Session 4/ Poster Hall / 15.15-15.45 Chair: Dr. Selma KARACAN

**PP208.** Relationship between Anthropometric Parameters and 100 Meter Freestyle Swimming Time of Elite Swimmers

<u>C. Çağlar BILDIRCIN</u>, Funda COŞKUN, Çiğdem ÖZDEMİR, Özgür GÜNAŞTI, Kerem Tuncay ÖZGÜNEN, Sanlı Sadi KURDAK

**PP209.** Analysis and Evaluation of Ball Contact Number of the Players in Goals Scored in FIFA 2014 World Cup

Erhan IŞIKDEMİR, Olcay MÜLAZIMOĞLU, Hamit CİHAN, Sinan ÇELİKBİLEK Murat ERDOĞDU

**PP210.** Comparison of the Acute Effects of Static and Dynamic Stretching Exercises on Flexibility, Agility, and Anaerobic Performance in Professional Football Players

Cem KURT, İlkay FIRTIN

**PP213.** The Effect of Isokinetic Exercises Programs on Athletes' Upper and Lower Extremity Muscle Groups <a href="Armağan ŞAHİN KAFKAS">Armağan ŞAHİN KAFKAS</a>, Bekir ÇOKSEVİM

**PP215.** The Relationship of the Isokinetic Knee Strength and Countermovement-Squat Jump in Soccer Barış GÜROL, Evrensel HEPER

**PP242.** The Examination of Effect on Anthropometric Characteristics and Motor Activities of Infrastructure Training at Soccer

Özgür DINÇER, Hasan SÖZEN, Ercüment ERDOĞAN, Erdal ARI, Burkay CEVAHIRCIOĞLU, Ercüment GEDİK

**PP243.** The Effect on Swimming Performance of the Land Training in 13 Year Old Swimmers

Evren Ebru ALTINCI, Burçak KESKİN, Tuğçe LAÇIN

**PP252.** The Effects of a 6 Week Plyometric Training Program on Agility in Taekwando Students Aged between 12-15

Gülşah AYDIN, Aysel PEHLİVANOĞLU

PP257. Age Related Differences in Sprint Performance of Turkish Soccer Referees

Atakan YILMAZ, Erkan ÖZDAMAR, Ayşe KİN İŞLER

Psycho-Social Areas in Sport / Poster Session 2/ Poster Hall / 15.15-15.45

Chair: Dr. Serdar KOCAEKŞİ

**PP 02**. Assessment of Motor Development During Early Childhood Period Irmak HÜRMERİÇ ALTUNSÖZ

**PP 164.** Effects of Team Cohesion and Intra-team Communication on Football Team's Success (Manisa Sample)

Zeynep ONAĞ, Murat ÖZŞAKER, Soner YILDIRIM, Rıdvan AYDEMİR

**PP 166.** The Levels of Physical Self-Description of Primary Education Students in Secondary Stage in terms of Gender and Socio-Economic Level

Barış BAYDEMİR, Hüseyin Özden YURDAKUL

**PP 169.** Tendency Causes and Prospects to Atletic Events Whose are in Secandary Education Dealing with Atletics Sports in Çanakkale

Gülçin GÖZAYDIN, Emin Cem SARIEL

PP 170. Comparison of Behaviours of Fair-Play (Sportsmanship) in Sports

Tahir KILIÇ, Mehmet FATİH ERÖZ, Şura ÇALIK

**PP 171.** Comparison of Life Quality of Students Who Are Studiying at Physical Education and Sports Teacher Education Program of School of Physical Education and Sports, and Teacher Education Program of Faculty of Education

Mehmet Fatih ERÖZ, TAHİR KILIC, Betül EVREN

**PP 177.** Investigation of Why the Violence and the Ugly Cheering Trends have in the Super Amateur and First Amateur league audience in Çanakkale

Gülçin GÖZAYDIN, Kasım YALÇIN

**PP 184.** The Relation of Pre-Competition Anxiety Levels with Competition Results in Rhythmic Gymnasts Pınar TATLIBAL, Beyazıt YEMEZ

**PP 186.** The Research of The Learned Helplessness in The Team Athletes According to The Gender differences Selin BİÇER BAİKOĞLU, Leyla SARAÇ

**PP 218.** Teacher Efficacy of Physical Education and Primary School Pre-Service Teachers at Abant İzzet Baysal University

Ercan ÇİFTÇİ, BURAK GÜREL, IŞIL AKTAĞ

PP 228. Analyse the State and Trait Anxiety of Arm Wrestling Athletes in Adults

Gönül SAK, Elif KARAGÜN

Sport Management/ Poster Session 1/ Poster Hall / 15.15-15.45

Chair: Dr. Dilşad ÇOKNAZ

**PP38.** A Comparison of The Attitudes of Students towards "Student-Academician Relationship" and "Reasons of not being able to Concentrate" in Sport Management Departments of Physical Education and Sport Schools (Akdeniz University Example)

Mustafa Haluk ÇEREZ

**PP683.** The Service Quality of Recreational Sports Centers in Campuses of University: Comparison of Public-Private University

Ali ERASLAN, Zafer ÇİMEN

**PP102.** Analysis of Sport-Related Objectives and Targets In Strategic Plans of Metropolitan Municipalities LeventATALI

**PP132.** Leadership ability and self- efficacy of the trainers who has been coaching individual or team sports Tuba PİDECİOĞLU, Selçuk GENCAY

PP137. Assessment of Recent Period Sport Policies

Gözde ALGÜN DOĞU, A.Azmi YETİM

**PP185.** History of Olympics and Contributions of Olympic Games to the City

Mehmet KARGÜN, <u>Mehmet DALKILIÇ</u>, Oktay KIZAR, Sihmehmet YİĞİT, Tekin ÖZTÜRK, Fikret RAMAZANOĞLU

PP286. Determination of Leadership Orientation of The Youth Leaders

Serkan KURTIPEK, Uğur ÖZER, Fatih YENEL

**PP402.** Leadership Styles of Sport Managers Serving in Turkish National Sport Organization Ferhat GÜNDOĞDU, Velittin BALCI

**PP408.** Ministry of Youth and Sports' Staff Perception of The Organizational Climate and Organizational Creativity Levels

Ümran YAHŞİ, Oğuz ÖZBEK

**PP413.** Decision-Makers of the Private Sports Clubs Psychological Violence (Mobbing) Due Diligence: The Case of Izmir Province

Hülya ÜNLÜ, Pınar GÜZEL, Sıdıka ATBİNİCİ

Physical Education and Sport / Poster Session 2/Poster Hall / 15.15-15.45

Chair: Dr. Serkan Revan

PP548. The examination of learning styles of high school students

Mehmet ULAŞ, Ender ŞENEL, Oğuz Kaan ESENTÜRK

**PP542.** The effect of gender on socialization in physically handicapped persons who regularly participated sports <u>Sehmus ASLAN</u>, Bülent AĞBUĞA

**PP549.** The Examination of The Cooperation Protocol of The Youth, Physical Education, Sport Services and Activities between the General Directorate of Youth and Sport and Ministry of National Education from the Point of School Sports

Volkan ÖZTÜRKALAN, Nevin GÜNDÜZ, N. Bahadır KAYIŞOĞLU

PP539. Perceptions for Career Values of Physical Education Teachers related to their Profession

Cenk TEMEL, Mehmet GÜLLÜ, Faruk AKÇINAR, Mustafa ALTINKÖK

**PP205.** The Opinions of Physical Education Teacher Candidates About Mid-term and Final Examinations Başak EROĞLU, Tülay KESER, Arif Kaan EROĞLU

**PP231.** Expectations of Families Who Sent Their Children to The Sport Schools (Example In Manisa City Centre)

Diyar KAYA, Hüseyin ÇAMLIYER, Mümine SOYTÜRK

**PP335.** Determining Physical Education Teachers' Views About Student Misbehaviors in Physical Education Lessons

Anıl Onur MERCANOĞLU, Kerem Yıldırım ŞİMŞEK

PP379. Sherborne Developmental Movement

Ayşegül AKSOY

**PP386.** Investigation of the Attitudes of the Sports High School Students Toward The Teaching Profession Serkan HACICAFEROĞLU, <u>Mehmet Hasan SELÇUK</u>

**PP430.** The Measurement and Evaluation Tools which Physical Education Teachers Use and Their Opinions about the Frequency of Usage

Fatih ÖZGÜL, Murat KANGALGİL

PP448. Effect of Concept Map Technique on Teaching Service Skill in Tenis

Erdal DEMİR, Kadir KOYUNCUOĞLU, Ahmet KIRCA, Turgut BELİK

Sport and Health Sciences / Poster Session 2/ Poster Hall / 15.15-15.45

**Chair: Dr. Mehmet PENSE** 

**PP 222.** The Assessment of the Dietary Supplement Use of Individuals Going to Fitness Center Nese TOKTAŞ TORUN, Ali AKKUŞ

**PP 230.** Determining of The Nutritional Knowledge Level of The Professional Youth Football Players Beril YILMAZ, Hazel DOĞAN

**PP 237.** The Effects of The Habit of Doing Exercise on Job Satisfaction and Physical Fitness Parameters of Civil Servants, Who Irregularly or Never Do Exercise

Fatih SARIKAYA, Birgül ARSLANOĞLU

**PP 249.** The Effect of Quality of Live Level is Physical Education and Sports Students with other Departments of The University Students in Elective Courses

Ozan YILMAZ, Enis ÇOLAK, Betül BAYAZIT, Serap ÇOLAK, Hakan AKDENİZ

**PP 261.** The Evaluation of Physical Fitnes in 8-10 Aged Children by Eurofit Test Battery: Case Study of Antalya-Kepez Provience

Neșe TOKTAȘ TORUN, Rıza DARENDELİOĞLU, Funda SEFEROĞLU

PP 265. Relationship between frequency of physical activity and abdominal visceral fat in children <a href="Javier BENÍTEZ-PORRES">Javier BENÍTEZ-PORRES</a>, Juan Francisco RAYA, Margarita CARRILLO, José RamónALVERO-CRUZ, Elvis A.CARNERO

**PP 289.** Return To Play Process of A Soccer Player Diagnosed With Malignant Peripheral Nerve Sheath Tumor Hilmi Mustafa DEMIR, <u>Sabriye ERCAN</u>, Cem ÇETIN

**PP 297.** The Effects of Body Weight Reduction with 4 and 8 Weeks of Physical Activity Program Applied <u>Gülsen TOSUN TUNÇ</u>, Hacer YILDIZ, Melih Nuri SALMAN

**PP 300.** Examination of Physical Activity Level in Office Workers According to Cardiovascular Risk Factors (The Akdeniz University Hospital Example)

Mükerrem ERDOĞAN, Zehra CERTEL, Alpay GÜVENÇ, Anıl ŞAHİN

**PP 327.** Investigation of Injury Zones and Reasons in Greco-Roman and Freestyle Wrestling Erdil DURUKAN

# November 8, 2014 Saturday/Poster Presentations

# Movement and Training Sciences /Poster Session 5/Poster Hall / 12.00-12.30

Chair: Dr. Nazmi SARITAŞ

**PP283.** The Effect of Age and Game Positions on Dribble Speed, a cycling Speed and Pass Ability in Soccer. Aykut Eren CANÜZMEZ

**PP288.** The Effect of Preseason Training Program on Physical and Physiological Parameters on Amputee Football Players

Haci YILDIZ, Mürsel BİÇER, Bekir MENDEŞ, Fırat AKCAN

**PP301.** Effects of Sports Massage and Static Stretching Exercises on Lactate Disappearance in National Male Judo Athletes

Mesut ÖZTÜRK, Cem KURT

**PP302.** The Effect Short Term Weight Loss of Saliva Cortisol and Saliva Testosterone and Performance Index in Young Wrestlers

Abdorreza EGHBAL MOGHANLOU, Mohammad Ali AZARBAYJANI, Hassan MATIN HOMAEI

**PP338.** The Effect of 6 Weeks Hockey Training Programme on Children's Physical and Pyhsiological Properties from Age 12-14

Osman SARI, Mürsel BİÇER, Alper Cenk GÜRKAN, Mustafa ÖZDAL

**PP339.** The Evolution of Physical Fitness Related to Performance of Primary and Secondary School Students in the Age Group 8-12

Ahmet YIKILMAZ, Mürsel BİÇER, Alper Cenk GÜRKAN, Mustafa ÖZDAL

PP341. Investigation the Effects of 6 Weeks Pilates Exercise on Biomotorical and Self Esteem of Young Women

Özhan BAVLI, Özlem KÖYBAŞI

**PP345.** Comparing the Capacity of Total Oxidant and Total Antioxidant Which is Induced by Acute Exercise Among Professional Footballers and Sedanteries

Bekir MENDEŞ, Cengiz ARSLAN, Müslüm AKAN, Mustafa ÖRKMEZ

**PP360.** Examining the Relationship Between Antropometric Characteristics, Athletic Performance and Functional Movement on Elite Level of Karate Athletes

Suat YILDIZ, Ertuğrul GELEN, Enes ERKAN

Movement and Training Sciences / Poster Session 6/ Poster Hall / 12.00-12.30

Chair: Dr. Sefa LÖK

**PP362.** Investigating the Relationship between Regular Physical Activity Participants Body Mass Index and Functional Movement Screen

Oğuz ÜÇER, Erkan GÜNAY, Aksel ÇELİK

PP371. Reliability of the New Generation Power Indices of Wingate All-out Test

Özgür ÖZKAYA, Ekim PEKÜNLÜ, Bülent YAPICIOĞLU

**PP374.** Effects of Different Exercise Programs on Lactate Response

Elvin ONARICI GÜNGÖR, İlker YILMAZ, Sanli Sadi KURDAK, Hayri ERTAN, Abdullah Ruhi SOYLU

**PP380.** A Comparison of Motoric and Anthropometric Characteristics of Basketball Players and Swimmers Barış BAYDEMİR, Hüseyin Özden YURDAKUL, Can ÖZGİDER, Bahar YILMAZ

**PP381.** A Comparison of Motoric Characteristics of Male Basketball and Soccer Players in Çanakkale Can ÖZGİDER, Hüseyin Özden YURDAKUL, Barış BAYDEMİR, Ferda EVCİ

**PP383.** Investigation of the Relationship between Agility, Body Composition and RAST for Football Players within the Age Group of 15-17 Years

Özgür ERİKOĞLU, <u>Gamze ERİKOĞLU ÖRER</u>, Emin SÜEL, Murat ERDOĞDU, Mehmet Murat ÖRER

**PP384.** Effects of Sprint Interval Versus Continuous Endurance Training on Physiological and Metabolic Adaptations in Young Healthy Adults

Gülbin RUDARLI NALÇAKAN

**PP394.** The Comparison of Some Anthropometric and Physical Features of 12-13 Age Group Elite and Beginner Skiers

Vicdan TETİK, Erkan ÇETİNKAYA, Ali Erdem CİĞERCİ

**PP399.** The Impact of Circadian Rhythm on Some Physical and Physiological Parameters in Elite Male Taekwondo Athletes

Emek CAN, Emine KUTLAY, Mehmet Zeki ÖZKOL, Caner ÇETINKAYA

**PP410.** Research for The Levels of Children's Skills, Whose Body Mass Indexes Are Eligible for The Sport of Tennis (Example of Konya)

Ensar KÖKTAŞ, Selma KARACAN

**PP411.** Effects of Stance Foot on Static Balance Performance among Junior Level Soccer Players Günay YILDIZER

Psycho-Social Areas in Sport / Poster Session 3/ Poster Hall / 12.00-12.30

Chair: Dr. Hamdi PEPE

**PP 248.** Turkish Adaptation of the Short Version of Moral Disengagement in Sport Scale (MDSS-S): Validity and Reliability Study

Bahri GÜRPINAR

PP 254. Leadership Behaviors in Undergraduate Tennis Players

T. Osman MUTLU, Halil Evren ŞENTÜRK

**PP 258.** The Relationships among Appearance Related Perceptions, Perfectionism and Dispositional Flow State of Exercise Participants

Gaye ERKMEN, F. Hülya AŞÇI, Sadettin KİRAZCI

**PP 274.** The Socioeconomic Factors Affecting Sports Preferences of the Members Participating in Physical Education and Sports Activities in the Youth Centers under the Metropolitan Municipality of Ankara Özbay GÜVEN, Lütfiye DEMİRCİÇEŞMESİ

**PP 279.** The Impact of Entertaining Athletics on Psychomotor Development of 12 age Group Children Önder GÖK, <u>Betül BAYAZIT</u>, Arda ÖZTÜRK

**PP 285.** The Assessment of Athletes Sport Age, Self-Efficacy and Sport Self Confidence in Combat Sports Nevzat ERDOĞAN, Serdar KOCAEKŞİ, Emre KARACA

PP 292. Institutionalization Process of Sociology of Sport

Veli Ozan ÇAKIR

**PP 311.** Examining The Experience of Sport Courage Among Wrestlers

Pervin BİLİR, Levent SANGÜN, Mansur CAVUSOĞLU

**PP 321.** How Effective To Do Exercise? Examining The Levels of Social Physique Anxiety and Physical Self-Perception of University Students Regarding Exercise Participation

Hakan KOLAYİS, İhsan SARI, Nurullah ÇELİK

**PP 324.** Comparison of Russian and Turkish Young Soccer Players' Sport Motivation Scale-6 (SMS-6) Scores Aleksandr N. VERAKSA, <u>Fatma İlker KERKEZ</u>, Sergey V. LEONOV, Gülşen MERTYÜZ

# Psycho-Social Areas in Sport / Poster Session 4/ Poster Hall / 12.00-12.30 Chair: Dr. Turhan TOROS

**PP 325.** Using sport imagery in Russian and Turkish Young Soccer Players

Aleksandr N. VERAKSA, Fatma İlker KERKEZ, Alena I. GRUSHKO, Gülşen MERTYÜZ

**PP 326.** Sport spectatorship motives of Physical Education and Sports School the Balikesir University Students <u>İlyas ÖZEN</u>, Erdil DURUKAN, Orçun Can YÜCEL

PP 329. Survey on Interest of High School Students of Amasya in Sports

Bursun GÜLER, Burak ÖZDEMİR, Bahadır ŞİLLİ, Aykut ARSLAN, İsmail TAŞKAYA

**PP 334.** Investigation of Emotional Intelligence Levels of Children Playing Football in Terms of Different Variables

Ayşe Feray ÖZBAL, Serdar KOCAEKŞİ, Burakcan KAPLAN

**PP 343.** The Investigation of Bodily/Kinesthetic Intelligence and Sportspersonship Orientation of Students in School of Physical Education and Sport

Ender ŞENEL, Mevlüt YILDIZ

**PP 349.** Research for Correlation Between Yellow Card, Competition's Result and Goals Allowed in During Soccer Competitions

Halil Orbay ÇOBANOĞLU

**PP 355.** Physical Education and Sports in High School Students Submissive Relationship Between Behavior and Self Esteem

Fikret ALINCAK, Hüseyin ÖZTÜRK, Nahit ÖZDAYI

**PP 356.** Investigation The Effects of Eight Weeks Pilates and Step-Aerobics on Sturctural, Biomotorical and Physiocological Variables of Sedantery Women

<u>Fatma ÖZTÜRK</u>, Özhan BAVLI

PP 369. An Investigation on Job Satisfaction Levels of Elite Female Volleyball Players

Ümit Doğan ÜSTÜN, Osman GÜMÜŞGÜL, Haluk KORKMAZ, Emre SEVİNÇ

**PP 372.** Investigating Superstition Behaviours of School of Physical Education and Sports Students According to Their Attending Levels to Individual and Team Sports

Mehmet DEMİREL, Utku IŞIK, Hilal SEVAL, Seda OKAT

**PP 376.** Emphatic Tendencies of Sports Sciences Faculty Students of Anadolu University Dilek YALIZ SOLMAZ, Gülsün AYDIN

## Physical Education and Sport / Poster Session 3/Poster Hall / 12.00-12.30

Chair: Dr. Murat KANGALGİL

**PP465.** Examination of the Relationship Between Emotional Intelligence and Life Satisfaction of the University Students in Sport Sciences

<u>İdris YILMAZ</u>, Fatih BEKTAŞ, Akın ÇELİK, Sabiha KAYA

**PP467.** Investigation of Attitude Towards Cheating Among University Students

Duygu HARMANDAR DEMİREL, <u>Utku IŞIK</u>, Mehmet DEMİREL, Sinem ADALIOĞLU, Canan YILDIZ

PP468. Examining Classroom Teachers' View About Teaching Physical Education

Şakir SERBES, Cevdet CENGİZ, Duygu Adile ATACER

**PP497.** Assessment of The Physical Training and Sports Department the Practices in Social Service Lesson in terms of Student Gains

Uğur ŞENTÜRK, Bilal KARAKOÇ

PP498. The Opinions and Implementations of Primary School Classroom Teachers Regarding The Game and

Physical Activities Course

<u>Uğur ŞENTÜRK</u>, Bilal KARAKOÇ, Erdal DEMİR, Kadir KOYUNCUOĞLU, Ümmühan BEKTAŞ

**PP507.** The Goalkeeper Issue in The Football of Turkey

Mehmet ŞAHİN, Nevruz BİLGİN

**PP526.** Primary School Second Stage Students' Opinions about Extracurricular Sport Activities Gizem TAHMAZOĞLU, Nevin GÜNDÜZ

**PP563.** Does The Gender Has Effect on Motor Motor Competence in Adolescents with Mild Intellectual Disability?

Ummuhan BAŞ ASLAN, Sehmus ASLAN

**PP588.** Reasons of Preferences and Future Expectations of Sports High School Students (Sample of Sarıkamış Sports High School)

Cansel ARSLANOĞLU, Erkal ARSLANOĞLU, Ergün ÇAKIR, Ali Dursun AYDIN

**PP619.** Analyzing the Attitudes of School Administrators towards Physical Education Lesson in Terms of Some Variables

Varol TUTAL, Ebubekir AKSAY, Mehmet EFE

Sport and Health Sciences / Poster Session 3/ Poster Hall / 12.00-12.30

Chair: Dr. Sultan HARBİLİ

**PP 344.** Balance, Muscle Strength and Performance Differences Between Non-obese and Obese Dislipidemic Patients'

Sabriye ERCAN, Hilmi Mustafa DEMİR, Cem ÇETİN

**PP 393.** The Effect of Bust Height on Some Selected Physical and Physiological Parameters in Footballers and Sedentaries

Bekir MENDEŞ, Eda MENDEŞ, Ayhan TEPE

**PP 396.** Comparison of Body Composition Parameters of Students in School of Physical Education and Sports According to Their Birth Months

Ayhan TEPE, Bekir MENDEŞ, Gökhan DOĞAN, Kenan UZUN

PP 397. Occuring of Swimming İnjuries

Zeynep TUNÇER, Erkan ÇETİNKAYA, Bilal DEMİRHAN, Ozan SEVER

**PP 412.** Investigation the Physical Activity Level of Physical Education Students İrem UZ

**PP 458.** Psychometric Findings of High School Students' Physical Activity Exercise Stages of Change Questionnaire

Cevdet CENGİZ, Kübra GÜLTEKİN

**PP 462.** Investigation of Physical Activity Levels of Secondary School Students in Terms of Some Parameters Mesut HEKİM, Yılmaz YÜKSEL

**PP 463.** Examination of Physical Activity Levels of University Students Taking Education at Different Departments in Term of Some Variables

Yılmaz YÜKSEL, Mesut HEKİM

PP 508. The Influences of Different Somatotypes on Some Performance Tests

<u>Deniz ŞENOL</u>, Davut ÖZBAĞ, M. Emin KAFKAS, Mahmut AÇAK, Özlem BAYSAL, Armağan ŞAHİN KAFKAS, Celal TAŞKIRAN, Mahmut ÇAY, Derya YAĞAR, Gökmen ÖZEN

## November 8, 2014 Saturday/Poster Presentations

# Movement and Training Sciences /Poster Session 7/Poster Hall / 14.30-15.00 Chair: Dr. Nigar KÜÇÜKKUBAŞ

**PP415.** Examination of the Relationship between Sprint Speed, Vertical Jump and Strength Parameters of Female Soccer Players

Kemal GÖRAL, Şenol GÖRAL

**PP417.** Analysis of Physical and Physiological Features of Weight Lifters at Age 15 - 17 Abdüsselam TURGUT, Erkan DEMİRKAN, Cağla CATAL

**PP419.** The Effect of 8-Week Balance and Coordination Training on the Performance of Deaf Judokas Önder KARAKOÇ, Mehmet Fatih KARAHÜSEYİNOĞLU

**PP420.** Weekly Different Number of Sprint Training's Effects on 13-14 Year Old Men Basketball Players' Jumping, Speed, Aerobic Endurance and Agility Performances

Barış KOYUNCUOĞLU, <u>Eylem ÇELİK</u>, Utku ALEMDAROĞLU

PP421. Changes of Heart Rate Values During Different Performance and Effects of This Changes on Performance

Gökhan DELİCEOĞLU, Beyza ŞİMŞEK

**PP423.** Examination of Game Dynamics Diversities between First Division Men Volleyball Teams Fatih UZUNER, <u>Evrim ÜNVER</u>, Şükrü Alpan CİNEMRE

**PP432.** The Effect of Plyometric Training on Balance and Soccer-Specific of Aged 11-12 Children Faruk AKÇINAR, Cengiz ARSLAN, Abdullah GÜLLÜ, Cemil ÇOLAK, Serpil AKÇINAR

**PP442.** The Effects of Postural Control and Balance Qualities on Technical Skills and Movement Profiles in Soccer Specific Small-Sided Games

Çağlar EDİS, Faik VURAL, Hikmet VURGUN, Tuncay VAROL, Serkan ÖZGÜR

**PP450.** Evaluation of Elite Female Volleyball Players' Heart Rates and Blood Pressure Values According To Positions Where They Play

Yeliz ÖZVEREN, Bahtiyar ÖZCALDIRAN

**PP466.** Swimming Exercise to Examine Muscle Tissue of Rats

Murat AKYÜZ, Recep SOSLU, Murat TAŞ, Öznur AKYÜZ

**PP476.** Examination of Changes of Flexibility and Some Physical Parameters after 6 Weeks Ems Training Eylem ÇELİK, Fatma BAŞARAN, Özlem KILIÇ

Movement and Training Sciences / Poster Session 8/ Poster Hall / 14.30-15.00

Chair: Dr. Serkan HAZAR

**PP484.** Examining the Influence of the Perceptual Motor Development Program on Balance and Fastness in 5-Year Old Preschool Children

Kadir KOYUNCUOĞLU, Uğur ŞENTÜRK, Hacı Ahmet TAŞPINAR, Tuba AKİF

**PP485.** Comparison of Men and Women Volleyball Players' Forearm Pass Kinamatically

Ahmet ALPTEKİN, Özlem KILIÇ, Eylem ÇELİK

**PP491.** A Comparison of the Body Composition Parametres of Turkish and Foreign National Judoists Menderes KABADAYI, Özgür BOSTANCI, Deniz Özge YÜCELOĞLU KESKİN, Ceyhun BİRİNCİ, <u>Alperen ERKİN</u>, Ali Kerim YILMAZ, Bahtınur TAŞCI

PP493. A Comparison of the Body Composition Parameters of Turkish and Foreign Female National Judoists Menderes KABADAYI, Deniz Özge YÜCELOĞLU KESKİN, Canan ASAL ULUS, Mustafa ÖZDAL, <u>Ali Kerim YILMAZ</u>, Alperen ERKIN, Deniz DEREBAŞI

**PP495.** Influence of Preschool (Ages 5 and 6) Gymnastic Exercises on Flexibility, Balance and Coordination Kadir KOYUNCUOĞLU, Uğur ŞENTÜRK, Hasan ABANOZ, Kayhan TAŞKIRAN

**PP500.** Examination of the Speed and Endurance Parameters of the Local Amateur League and Super Amateur League Football Players of The City of Çanakkale

Hasan ABANOZ, Kadir KOYUNCUOĞLU, Hacı Ahmet TAŞPINAR, Batuhan IRMAK

**PP503.** Analyzing Anthropometric and Mothoric Features of 11-12 Age Group Football Player Children After 8 Weeks Training.

Can ÖZGİDER, Hüseyin Özden YURDAKUL, Barış BAYDEMİR, Enis KAYA

PP516. Relationship among Agility, Sprint, Strength and Balance in Ice Hockey Players

Arda ÖZCELİK, Atakan YILMAZ, Aydan AYTAR, Mustafa GÜLŞEN, Ayşe KİN İŞLER

**PP527.** The Effect of Different Liquids Intake during Aerobic Exercise on Appetite Regulating Hormones in Obese Women

Raif ZİLELİ, Önder ŞEMŞEK, Mehmet TOSUN, Erdinç SERİN

Psycho-Social Areas in Sport / Poster Session 5/ Poster Hall / 14.30-15.00

Chair: Dr. Hülya AŞÇI

**PP 378.** Subjective Well-Being Levels of Teacher Candidates: A Research at Anadolu University Physical Education and Sports Teaching Department

Dilek YALIZ SOLMAZ, Gülsün AYDIN

**PP 387.** Competition-Related Motive for Athletes: An Example From A Summer Sport School <u>Ümit Doğan ÜSTÜN</u>, Mehmet ACET, Adnan ERSOY

PP 401. An Investigation of Individual and Team Sports Referees' Resilience

Atahan ALTINTAŞ, Feyza M. KARA, Selen KELECEK, F. Hülya AŞÇI

**PP 449.** Assessment of Personality Traits of Performance Tennis Players Above the Age of 18 According to Gender

<u>Erdal DEMİR</u>, Kadir KOYUNCUOĞLU, Bilal KARAKOÇ, Hasan ABANOZ, Uğur ŞENTÜRK, Hacı Ahmet TAŞPINAR, Esra YAZICI

**PP 451.** Anadolu University Physical Education and Sport School Students' Exposuring Factors to Violence Gülsün AYDIN, Dilek YALIZ SOLMAZ

**PP 460.** The Moral Maturity Levels of Student – Athletes

Arıkan EKTİRİCİ, Dilek YALIZ SOLMAZ

**PP 480.** Examination of Stress-Coping Styles of The Athletes Who Participated in Koç Fest University Sports Games Turkey in Terms of Gender, Sportive Branch and Sportive Experience

Ziya BAHADIR, Zehra CERTEL, Atilla PULUR, Kazım KAYA

**PP 494.** New Method in Psychological Analysis For Improving Performance of Player in Basketball With Collaboration of Information Technologies

Turhan TOROS, Volkan Kadir GÜNGÖR

**PP 529.** An Examination of Sports Participation Motives of Middle and High School Students Hidayet Suha YÜKSEL, Perican BAYAR, <u>Onur Mutlu YAŞAR</u>

PP 547. An Analysis of Styles of Imagery In Elite Wrestlers

Fatih KARAKAŞ, Berna METE ERGİN, Yasemin ÇAKMAK YİLDİZHAN

**PP 566.** An Investigation of the Participation Motivation of Amateur and Professional Football Players <u>Erol DOĞAN</u>, Hamza KÜÇÜK, Egemen ERMİŞ

Physical Education and Sport / Poster Session 4/ Poster Hall / 14.30-15.00

Chair: Dr. Yunus ARSLAN

**PP626.** Analyzing the Attitudes of School Administrators towards Physical Education Lesson Varol TUTAL, Ebubekir AKSAY, Mehmet EFE

**PP653.** The Impact of Physical Activities on the Motor Skills, Mental and Social Development of Children with ASD

Sinem KORTAY CANALOĞLU

**PP677.** Effects of Exercise Program on Balance in Children with Cerebral Palsy

Verda AKYÜZ, Yaşar TATAR, Selda UZUN, <u>Nejla GERÇEK</u>, Sevinç KARABÜRK, Nusret RAMAZANOĞLU, Cengiz KARAGÖZOĞLU

**PP701.** Effects of Long Term Exercise and Sports Program on Physical Performance in Children with Hemiplegia

Sevinç KARABÜRK, Yaşar TATAR, <u>Selda UZUN</u>, Nejla GERÇEK, Verda AKYÜZ, Nusret RAMAZANOĞLU, Asiye Filiz ÇAMLIGÜNEY

**PP710.** Multiple Intelligences Theory of Physical Education and Sport Studies in terms of Content Analyses to Evaluate

Erhun TEKAKPINAR, Figen YAMAN LESİNGER

Sport and Health Sciences / Poster Session 4/Poster Hall / 14.30-15.00

Chair: Dr. Ayda KARACA

**PP 509.** Evaluation of Physical Activity Levels and Skin Fold Thickness of Students in Government and Private Schools

Sinan UĞRAŞ, Abdullah GÜLLÜ, Esin GÜLLÜ, Sercan ÖZEREN

**PP 519.** Examining The Influence of The Existence of Palmaris Longus Tendon on The Grip Strengths of Students Having Different Somatotypes

<u>Deniz ŞENOL</u>, Davut ÖZBAĞ, M. Emin KAFKAS, Mahmut AÇAK, Özlem BAYSAL, Armağan ŞAHİN KAFKAS, Celal TAŞKIRAN, Mahmut ÇAY, Derya YAĞAR, Gökmen ÖZEN

**PP 528.** The Attendance to Sport of Women Living in Bilecik, Obesity Prevalence and Risk Factors Raif ZİLELİ, Önder ŞEMŞEK, Hüseyin ÖZKAMÇI, Gürkan DİKER

**PP 532.** Elite Level in Turkey Tennis Players in The Prevalence and Causes Investigation of Injury Orhan AHMET ŞENER, Taner ZİYLAN

**PP 609.** The Comparison of Performance Parameters and Anthropometric Characteristics and Indexes of Underwater Rugby Players and Football Players

Aysel TATLI, Murat SON, Bergün MERİÇ BİNGÜL, Deniz DEMİRCİ, Çiğdem BULGAN, Menşure AYDIN

**PP 709.** Comparison Between Functional Movement Screen (fms) and Body Mass Index of the Swimmers Oğuz ÜÇER, M. İsmet TOK, Erkan GÜNAY, Aksel ÇELİK

Sport Management / Poster Session 2/ Poster Hall / 14.30-15.00

Chair: Dr. Süleyman Murat YILDIZ

**PP52.** The Relationships between Service Quality, Customer Satisfaction and Customer Loyalty: An Empirical Investigation of Fitness Center

Nur SAVAŞ, Süleyman Murat YILDIZ

**PP434.** The Analysis of Expectation and Satisfaction of Volunteers Who Work for Sports Organizations Sevim GÜLLÜ, Abdullah ÖZTÜRK, Bilge DONUK

**PP510.** Assessment on Service Quality Expectations and Perceptions of People Getting Service from Fitness Centers

Ersan TOLUKAN, Hamdi Alper GÜNGÖRMÜŞ, Halil SAROL

**PP486.** Investigation The Effects of Leadership Style of Sport Managers on Organizational Commitment, Organizational Climate and Job Satisfaction

Yasemin KEMERİZ, Özhan BAVLI

PP587. Decentralization in The Turkish Sports Management

#### Enes IŞIKGÖZ

**PP611.** Relationship between supporter and media on international football tournaments(Case study :Euro 2008) Gökalp DEMIR, Aytekin ALPULLU

**PP643.** Internet and Social Media Utilization Preferences of Basketball Clubs in Turkey Beko Premier League SencerÖZKAL, Yeşim ALBAYRAK KURUOĞLU, HülyaÜNLÜ

**PP644.** An Evaluation of the Participation of Turkish Female Athletes in the 2012 London Olympics and its Press Coverage in the Written Media

Meliha ATALAY NOORDEGRAAF, Dilsad ÇOKNAZ

**PP663.** Investigating Job Satisfactions of Professional Footballers from Their Demographic Characteristic's Point of View

Hayri AYDOĞAN, A.Azmi YETİM

## November 9, 2014 Sunday/Poster Presentations

# Movement and Training Sciences /Poster Session 9/Poster Hall / 12.00-12.30 Chair: Dr. Mehmet KALE

**PP541.** The Examining of Acute Changes in Some Muscle Damage and Inflammation Markers Subsequent to Free Style Wrestling

<u>Muhammed Emin KAFKAS</u>, Celal TAŞKIRAN, Armağan ŞAHİN KAFKAS, Gökmen ÖZEN, Çağatay TAŞKAPAN

**PP554**. The Effect of Different Ambient Temperatures on Motoric Features

Ergün CAKIR, Selami YÜKSEK, Bülent ASMA, Erkal ARSLANOĞLU

**PP558**. Investigating Differences on Physical and Physiological Parameters in Competitive Athletics between the Age of 14-16 Years

Gürcan ÜNLÜ, Damla GÖNEN, Tuba MELEKOĞLU

**PP561.** The Effect of the Gymnastics Training on Growth and Biomotor Abilities in 4-6 Years of Age Children İnci KESİLMİŞ, Manolya AKIN

**PP562.** Hematological Parameters of Male Athletes in Different Sport Branches Before and After Exercise Gülsün AYDIN

**PP567.** Investigating of Effects of Delayed Onset Muscle Soreness, Occurring After Eccentric Exercise, on Some Biochemical Parameters and Shooting Accuracy in Basketball

Mert KAYHAN, Mehmet ACET, Sayit ALTIKAT

**PP574.** Relations among the Parameters of Paldeung Technique Effect Level, Trochanteric Height, Foot Length and Anaerobic Power in Taekwondo Athletes

Emek CAN, Emine KUTLAY, Mehmet Zeki ÖZKOL, Caner ÇETINKAYA

**PP577.** Comparison of Visceral Fat and Body Composition Measured by Dual-Energy X-ray Absorptiometry Between Young Male Athletes and Non-athletes.

Hüseyin ASLAN, Ümid KARLI, Alpay GÜVENÇ, Bülent IŞIK, Abdussamet BATUR, Caner AÇIKADA

**PP589.** Correlation of Functional Movement Screen Scores on Sprint Performance and Relevancy of Injury History

Akif YAZICI, Alper AŞÇI

PP590. The Effect of Fatique on Lower Extremity Coordination in Badminton Players

Mert AYDOĞMUŞ, Erkal ARSLANOĞLU, Ömer ŞENEL

**PP711.** The Effects of Coenzyme Q10 Supplements on Acute Exercise Induced Oxidative Stress in Male and Female Rat Heart Tissue

Serkan REVAN, Nilsel OKUDAN, Şükrü Serdar BALCI, Muaz BELVIRANLI, Hamdi PEPE, Hakkı GÖKBEL

## Movement and Training Sciences / Poster Session 10/ Poster Hall / 12.00-12.30

Chair: Dr. Alpay GÜVENÇ

**PP591.** Relationship between Weight Loss and Lactate Concentration Occurring in Match Conditions in Elite Greco-Roman Wrestlers

Erkal ARSLANOĞLU, Ömer ŞENEL

PP592. Nitric Oxide Response to Maximal Acute Exercise in Aerobic and Anaerobic Athletes

Mehmet Zeki ÖZKOL, S. Rana VAROL, Faruk TURGAY, Faik VURAL, Tolga AKŞIT

**PP594.** An Assessment of the Static and Dynamic Balance Performance of Footballers Based on Their Positions <u>Hamza KÜÇÜK</u>, Mehmet Yalçın TAŞMEKTEPLİĞİL, Soner ÇANKAYA, Musa ÇÖN

**PP603.** UEFA Champions League and UEFA Europa League Football Matches Some of the Statistics in Terms of Comparison

Muhammed Zahit KAHRAMAN, Arslan KALKAVAN, Nurullah Emir EKİNCİ, Şeyhmus BAYSAL

**PP604.** 2010 and 2014 Football World Cup Competitions Some of the Statistics in Terms of Comparison

Cuma ECE, Arslan KALKAVAN, Muhammed Zahit KAHRAMAN, Şeyhmus BAYSAL

**PP606.** The Effects of EMS Exercises on Body Composition, Anthropometric Characteristics and Single Repeat Maximal Strength of Quadriceps and Hamstring Muscles

Mustafa KÖKSAL, Turan KARAGÖZ, Bergün MERİÇ BİNGÜL, Menşure AYDIN, Ciğdem BULGAN

**PP607.** The Examination of Some Anaerobic Performance Parameters of Young Basketball Players Gökhan DELİCEOĞLU, Erdal ARI, <u>Selman KAYA</u>

**PP617.** Effects of Different Stretching Techniques on Anaerobic Performance

İrem BİÇKİCİ, Hakan YARAR, Çetin ÇELEBİOĞLU, Ümid KARLİ, Nurgül İKİZOĞLU, Hüseyin AKSU

**PP624.** The Relation between Running Speed Parameter at Anaerobic Threshold and Recovery in Elite Soccer Players

Emin SÜEL, Hüseyin ÖZKAMÇI, İbrahim ŞAHİN, Haluk SÜEL, Rıfat DEMİR

**PP628.** Effect of Anterior Cruciate Ligament and Bucket Handle Meniscus Tear on Isokinetic Knee Extension-Flexion Peak Torque Values: A Case Report

Ayhan Taner ERDOĞAN, Gökhan UMUTLU, Uğur CAN

PP632. Kinematic Evaluation of Different Start Techniques on Swimming Performance

Nusret RAMAZANOĞLU, Yaşar TATAR, Begüm PİŞKİNTAŞ, <u>Göktuğ ŞANLI</u>, Nejla GERÇEK, Selda UZUN, Semih YILMAZ, İrfan GÜLMEZ

## Movement and Training Sciences / Poster Session 11/ Poster Hall / 12.00-12.30

Chair: Dr. Bekir YÜKTAŞIR

PP635. The Effects of Training on Respiratory System of Children Aged 13-14

Tuba MELEKOĞLU, Gürcan ÜNLÜ

**PP638.** Whole Body Vibration Training on the Sedentary Young Effects on Body Composition and Anthropometric Values

Özgür NALBANT

**PP642.** Investigation of the Effects of Sleep Deprivation on Visual and Auditory Reaction Time Parameters Kutlu AYDIN, Ümid KARLI, <u>Hakan YARAR</u>

**PP651.** Effects of Swimming on Pulmonary Functions

İsmail KOCA, Gülsün AYDIN

**PP669.** The Effects of Body Composition, Anthropometric Characteristics and Specific Exercise Types on Service Performance in Tennis Players

Erhan KARA, <u>Tolga AKŞİT</u>, Turan IŞIK, Mehmet Zeki ÖZKOL

**PP671.** Relationships of Freestyle Swimming Performance with Dynamic Strength and Knee Isokinetic Parameters

Mehmet KALE, Mert ERKAN, Erkan AKDOĞAN

**PP673.** Effects of Swimming Training on Female and Male Swimmers' Anthropometric Characteristics <u>İsmail KOCA</u>, Gülsün AYDIN

PP692. The Effects of Acute Maximal Exercise on Oxidative Stress and Antioxidant Capacity in Smoking Subjects

<u>Serkan REVAN</u>, Şükrü Serdar BALCI, Hamdi PEPE, Firuze KURTOĞLU

**PP693.** Technical Perception Assessment for Performance Enhancement of Elite Karate-Do Players by Gaze Characteristics Analysis: A Pilot Study

<u>Taylan Hayri BALCIOĞLU</u>, Duygu ŞAHİN, Moataz ASSEM, Adil Deniz DURU, Dilek GÖKSEL DURU

**PP700.** Evaluation of Strength and Balance Parameters of the 11-13 Age Group Taekwondo Athletes Selda UZUN, <u>Asiye Filiz ÇAMLIGÜNEY</u>, Elif Sibel ATIŞ, Nusret RAMAZANOĞLU, İrfan GÜLMEZ, Cengiz KARAGÖZOĞLÜ

# Psycho-Social Areas in Sport / Poster Session 6/ Poster Hall / 12.00-12.30 Chair: Dr. Funda AKCAN AMCA

**PP 601.** The Religious Aspect of People Who Are Doing Sport/Exercise for A Healthy Life Mehmet Haşim AKGÜL, Turgut KAPLAN

**PP 630.** Examining the Motivation in Sport Participation of 11-14 Age Group Students in Term of Gender Ali AYCAN, <u>Kadir YILDIZ</u>

**PP 633.** The Effects of Alexithymia on Self-Esteem and Physical Self-Perception of Erciyes University Indoor Soccer Team Players

Serdar SUCAN

**PP 641.** Examining The Learning Styles of Physical Education and Teaching Department Students Nurullah ÇELİK, Hakan KOLAYİŞ

PP 647. The Effect of Participation to Recreational Activities on Job Satisfaction

Gizem KARAKAS, Hakan KOLAYİŞ, İhsan SARI

PP 655. Different Audience Profile on Football Matches Played of Disciplinary Practices in terms of

Comparison

Muhammed Zahit KAHRAMAN, Arslan KALKAVAN, M. Fatih BİLİCİ, Ömer Faruk BİLİCİ, Sezer CACİM

PP 659. As Part of Aggression and Violence in Sports: Hooliganism

Osman GÜMÜŞGÜL, Mehmet ACET, Adnan ERSOY

Psycho-Social Areas in Sport / Poster Session 7/Poster Hall / 12.00-12.30

Chair: Dr. Canan KOCA ARITAN

**PP 666.** The Investigation of Realization Levels of Expectations And Reasons of Tennis Orientation Individulas Who Engaged in Amateur Tennis Sport in Diyarbakır

Canan Gülbin ESKİYECEK, Özlem YENİGÜN

**PP 678.** Investigating Physical Education and Sports Majors' Happiness Level with Regard to Various Variables

Cem Y. YILMAZ, Leyla YILMAZ, Ayten ACUN, Eren ULUÖZ

**PP 681.** 4 Referee and Referee 6 Managed With The Discipline of Football Matches in terms of Application Comparison

Nurullah Emir EKİNCİ, Arslan KALKAVAN, Muhammed Zahit KAHRAMAN, Osman SARI

**PP 684.** Gender Difference in Coincidence Anticipation Timing: Effect of Exercise Intensity and Stimulus Speed

Foad ALAEİ, Sadettin KİRAZCI

**PP 690.** A study on the Comparison of Problem Solving Skills of Female and Male Weight Lifters subject to Gender and Educational Level

Aylın DAŞDELEN, F. Yeşim KÖRMÜKÇÜ, Hakan AKDENİZ, Hülya ADALI, M.Oğuzhan OKUMUŞ

Recreation / Poster Session 2/ Poster Hall / 12.00-12.30

Chair: Dr. Ezgi ERTUZUN

PP 504. The Investigation of Extreme Sportmens State-Trait Anger Expression

Merve CEYLAN, Fahri AKCAKOYUN

**PP 511.** Comparison of Leisure Time Attitudes of University Students by Different Variables Ersan TOLUKAN, Hamdi Alper GUNGORMUS, Halil SAROL

PP 584. Recreational Activities in Crime Prevention and Reduction

Caner OZGEN, Velittin BALCI

PP 595. Leisure Time Attitudes of Ankara Police College Students

Zafer CELIK, Zafer CIMEN

PP 599. Kahramanmaras Kids Games Grabbing Shoes

Abdullah DOGAN, Aydoğan SOYGUDEN

**PP 637.** Analyzing the Benefits of Leisure Activities that are presented in Youth Center on the Young Participants Individual Thoughts

Emre BILGIN, Suat ÖZFIDAN

**PP 649.** The Game of Hollic and its Types Involved in Traditional Childrens' Game Culture in Province of Malatva

Abdullah DOGAN, Menderes KABADAYI, Mehmet GUL

**PP 670**. A Study on the Factors that Motivate Kocaeli University and Sakarya University Physical Education and Sport Department Students to Participate in Recreational Activities

Dilek AKDAG, Hakan AKDENIZ, Yeşim KORMUKCU, Sebnem TELCI, Ozan YILMAZ

**PP 672.** A Study on The Customer Satisfaction of Individuals Coming to Fitness Centers (The Green Park Hotel Example)

Murat AKTUMER, Hakan AKDENIZ, Gülşah SEKBAN, Oğuzhan OKUMUS, Ozan YILMAZ

#### MECHANISMS OF SKELETAL MUSCLE FATIGUE AND RECOVERY

#### Håkan Westerblad

Department of Physiology and Pharmacology, Karolinska Institutet

#### **Abstract**

Intense, repeated activation of skeletal muscles causes a decline in performance known as muscle fatigue. The decline in performance includes weaker and slower contractions. Changes in many factors contribute to fatigue development, including impaired neural activation of muscle cells (central fatigue) as well as impairments intrinsic to the muscle cells (peripheral fatigue). Peripheral fatigue may include defects in action potential propagation, in sarcoplasmic reticulum (SR) Ca<sup>2+</sup> handling and/or in the function of the contractile elements. A range of mechanisms may contribute to the decline in performance during fatiguing contractions and these include changes in ionic composition, metabolite concentration, phosphorylation status and production of reactive oxygen/nitrogen species (ROS/RNS). Moreover, the recovery of contractile function after induction of fatigue can be very slow and several factors contributing to this delayed recovery have been identified (Allen *et al.*, 2008).

In our studies of fatigue induced by repeated maximal contractions in single muscle fibres, we have identified two major mechanisms underlying decreased force production during acute fatigue and recovery:

- (1) Increased concentration of inorganic phosphate ions  $(P_i)$ , due to breakdown of phosphocreatine, is a major cause of decreased force production during ongoing fatiguing stimulation. Increased  $P_i$  first decreases myofibrillar force production and later it contributes to the decreased SR  $Ca^{2+}$  release when fibres become exhausted.
- (2) The production of ROS/RNS increases during fatigue and they contribute to the prolonged (hours) force depression that is often observed after fatiguing stimulation. ROS/RNS then either decrease the SR Ca<sup>2+</sup> release or reduce the myofibrillar Ca<sup>2+</sup> sensitivity. Both these mechanisms mostly affect force produced at low stimulation frequencies, and hence this force depression is named "prolonged low-frequency force depression" (PLFFD).

Many different activities cause fatigue and an important challenge is to identify the relative importance of various mechanisms in different conditions. Most of the mechanistic studies of fatigue and recovery have been performed on isolated muscle and another major challenge is to use the knowledge generated in these studies to identify the mechanisms of fatigue and recovery in humans under normal conditions and in association with various diseases.

#### References

Allen DG, Lamb GD & Westerblad H (2008). Skeletal muscle fatigue: cellular mechanisms. *Physiol Rev* 88, 287-332.

# WHOLE-SCHOOL PHYSICAL ACTIVITY PROGRAMS . . . A ROAD TO RELEVANCE AND CREDIBILITY?

Hans van der Mars, Ph.D.

Arizona State University

## **Abstract**

With few exceptions, in most developed countries physical education is a marginalized school subject (Hardman & Marshall, 2009). Relative to so-called "core subjects" such as English, mathematics and science, physical education (along with art and music) are often targeted for reduction in minutes per week, and /or elimination altogether. There is evidence that one consequence of the emphasis on "core subjects" has resulted in significant shifts in time resources (i.e., quantity and/or length of physical education lessons per week) as well as recess (Center of Educational Policy, 2007; 2008; Berliner & Glass, 2014). Moreover, physical educators are asked as well to integrate academic subjects into their lessons. If current trends in educational reform continue, physical education will remain its marginalized status likely perpetuate this status as increasingly countries are seeking to focus more on just academic performance.

In the last three decades, the upward trends in rising overweight and obesity levels in youth (Ogden et al., 2012) have provided the basis for a public health orientation with promotion of lifelong physical activity as a central program outcome. In the United States, there is strong support for this orientation among numerous U.S. government agencies, research and professional societies, as well as parents. In recent years evidence-based physical activity recommendations for all Americans have been developed (USDHHS, 2008; 2012), as well as a National Physical Activity Plan (NPAP, 2010). At the same time, the National Association of Sport and Physical Education (NASPE) developed a fivecomponent Comprehensive School Physical Activity Program (CSPAP) framework (NASPE, 2008; 2012). Its main goal is to create school environments that allow for all students at the school to accumulate at least 60 minutes of Moderate to Vigorous Physical Activity (MVPA). The centerpiece component of the model is an effective physical education program. Additional program components include a) the before- and after school time, b) during the school day time, c) school staff involvement, and d) family and community involvement. Similar whole-school physical activity programs models have been initiated in countries such Finland, Ireland, Switzerland, and Poland. While this model is gaining recognition, it is not universally accepted within the U.S. physical education community, continuing the lack of consensus on what can and should be defensible and credible program outcomes.

In this presentation the main features of the CSPAP model will be outlined in detail, as well as its evidence base. Moreover, questions will be raised on a) how and whether CSPAPs can be implemented, and b) what the implications are for preparing the next generation of physical education teaching professionals to plan, deliver and implement CSPAPs. The central premise of the presentation is if we want physical education to become a relevant and credible school subject we cannot afford not to make the public health orientation a part of what school physical education stands for.

# SPORT IN THE CONTEXT OF CURRENT TRENDS IN LEISURE AND RECREATION: IMPLICATIONS FOR SOCIOLOGY'S RESEARCH AGENDA

#### Ken Roberts

University of Liverpool and University of Chester

#### Abstract

This presentation argues that sociology is the rightful home in the academy for the study of sport. This is because sports are social inventions. What sport 'is' has varied by time and place. This means that sport is primarily a sociological problem. Yet sociology arrived late in studying sport. The discipline dates from the 19<sup>th</sup> century but sport became specialist sub-discipline only from the 1960s onwards. It remained a tiny sub-discipline for several decades, but this has changed since the 1990s. It is now one of sociology's most popular specialisms. It is time for sociology to flex its muscles.

Up to now sociology's impact on the study of sport has been muted. This is because by the time of its late-arrival the study of sport had already been claimed by the natural sciences, and governments had their own uses for sport and their own questions to which they wanted answers. So sociology has tended to be a hand-maiden. Its issues have been set outside the discipline. For example, the 'barriers' responsible for the unequal representation in sport of different social classes, males and females, and different age groups have been investigated ad nauseum, as have the kinds of well-being (in addition to physical fitness and health) that sport can deliver.

This presentation urges sport's social researchers to set their own agendas. The principal questions must always concern how sport is being reshaped by wider social, economic and political trends. In the economically advanced countries, recent and ongoing changes are signalled by the frequent use of a series of keywords. Some are prefixed by 'post'. Present-day societies are described as post-industrial, post-Fordist and post-modern. Knowledge economy and information society signal the significance of new technologies. Post-welfare and neo-liberalism signal the now dominant political contexts. We also need to address the significance of the 2008-09 financial crash, the subsequent recession and (in Western Europe) the persistent austerity regimes. Alongside these changes, gender differences have narrowed in education, labour markets and also within families, populations are ageing, and income inequalities have widened dramatically.

How has sport been affected? The industry, and present-day sport is an industry, has fared rather well. Top spectator sport is booming in terms of crowd/audiences sizes and revenues. It is benefitting from the escalating value of the rights to live broadcast sports events. Needless to say, this revenue is distributed very unequally. Very little trickles down to the grassroots. Most of the new revenue flows straight out of sport and into the top players' bank accounts. The participation side of the sports industry is also flourishing in terms of revenues. Commercial fitness gyms, together with what are called lifestyle and extreme sports, are commercial success stories. Consumer spending on participation and membership fees, sports clothing, footwear and equipment has risen even in countries where the typical household's real income and leisure spending have fallen.

Sociology has a rich stock of theories with which to debate the links between developments in sport and wider social, economic and political trends. Marxists argue that the trends in sport are outcomes of the remorseless expansion of capitalism, leading to the exploitation and alienation of fans and players. Others argue that sport is simply adjusting to the long-term trend towards populations becoming more affluent, with individualised lifestyles and biographies which are difficult to reconcile with competitive sports, especially team sports. Supporters of Pierre Bourdieu, probably the world's most influential sociologist since the mid-20<sup>th</sup> century, say that the basic processes that operate in the sports 'field' remain unchanged.

The time is ripe for sport's social researchers to push these debates to the heart of their own agendas.

Keywords: financial crash, leisure, post-industrialism, sport

## PHYSICAL ACTIVITY ON PRESCRIPTION- THE ROLE OF SPORTS MEDICINE

## Mats Börjesson

Astrand laboratory, School of Sport and Health Sciences & Department of Cardiology, Karolinska University Hospital, Stockholm, Sweden

## **Abstract**

Few question the evidence on the importance of physical activity to increase health. The great challenge for the health care system now, is to translate this knowledge into clinical practice, in a number of disciplines. Sports Medicine should have a key position in this development.

Several barriers exist for PA to be an integrated part of treatment options provided by the health care system. Importantly, evidence on the efficacy of different methods to increase the level of PA has emerged in recent years. The Swedish model of "Exercise on prescription" has gained significant results. However, other methods have failed to show significant effects. Thus, such methods still needs further study. Other great barriers to overcome include the motivation of the patient, as well as of the health care providers for these changes. The latter will play a key role for the success and implementation of PA into normal clinical practice. Education will increase motivation and knowledge of health care professionals, and should start at University level and continue in professional life.

The Sports Medicine physicians play a major potential role in implementing physical activity as a treatment tool in health care. Firstly, while Sports Medicine traditionally have been focusing on (elite) sports, the increasing problem of non-communicable diseases, have made it important also to focus on physical activity for health, also for Sports Medicine physicians. Consequently, many Sports Medicine Associations world-wide, have changed their names to "Sports and Exercise Medicine Associations". Secondly, Sports Medicine specialists, with their knowledge on exercise, are possibly best equipped to address the specific questions related to physical activity. This is relevant, especially since other specialists increasingly will want to use "exercise as medicine".

# FROM HEIGHTENED ACHIEVEMENT STRIVING TO PSYCHOLOGICAL DEBILITATION AND BURNOUT: THE INFLUENCE OF PERFECTIONISM ON MOTIVATIONAL PROCESSES IN SPORT

Professor Howard K. Hall (PhD)

York St. John University, UK

It has recently been suggested that perfectionists are more than misguided idealists who strive compulsively to accomplish the impossible. Rather, they appear to be "tortured souls" whose strong motivational impulses clash with important goals and values and this conflict gives rise to considerable emotional turmoil (Hofmann, Baumeister, Forster & Vohs, 2012). In sport, as in other areas of psychology, there has been significant disagreement about the influence that perfectionism has on individuals (Hall, Hill & Appleton, 2012; Stoeber, 2012). Some have argued that because elite athletes seem to exhibit a number of important features of perfectionism it should be considered to represent a hallmark quality of exceptional athletic performance and an adaptive feature to be nurtured by coaches (Gould, Dieffenbach & Moffatt, 2002). Others have argued that while perfectionistic striving may contribute to athletic success, its psychological consequences undermine adaptive functioning (Flett & Hewitt, 2005; Hall, 2006; in press). These individuals consider perfectionism to be a broadly debilitating personality characteristic that while energising heightened achievement striving, will distort the meaning of achievement and induce patterns of motivation that ultimately lead to performance impairment and psychological distress. In this presentation, I will discuss the nature and consequences of perfectionism in athletes and use current research evidence to provide some lessons for sport coaches concerning how and why perfectionism undermines the quality of athlete motivation. I will first examine what perfectionism entails, clarify how it differs from adaptive forms of achievement striving and explain why it may be inappropriate to consider perfectionism as a positive, adaptive or healthy form of striving. I will then present evidence from an emerging body of research conducted in sporting contexts which suggests that when considered as a broad multidimensional personality characteristic, perfectionism is largely debilitating. Using illustrative examples I will attempt to outline the process by which perfectionism may predispose high achieving athletes to experience both chronic disaffection and athlete burnout, and, through the employment of current motivational theory, I will explore various psychological mechanisms that offer insight into how heightened achievement striving becomes distorted and ultimately transformed into motivational debilitation. Finally, I will address how perfectionism might be managed in order to prevent athletes from experiencing its damaging psychological processes.

#### INVITED PRESENTATIONS

#### BENEFICIAL EFFECTS OF DIETARY NITRATE ON SKELETAL MUSCLE PERFORMANCE

Niklas Ivarsson & Håkan Westerblad

Department of Physiology and Pharmacology, Karolinska Institutet

#### **Abstract**

Inorganic nitrate ( $NO_3^-$ ) and nitrite ( $NO_2^-$ ) are circulating products of endogenous nitric oxide (NO) production. Recent studies show that these ions can be recycled back to NO. Thus, this provides an alternative route of NO synthesis, which occurs in parallel with the classical L-arginine–NO synthase pathway (Lundberg *et al.*, 2008). Dietary intake of nitrate–rich vegetables (e.g. spinach and beetroots) can increase the NO pool, which can exert beneficial physiological effects, such as, reduction of blood pressure, protection against ischaemia–reperfusion injury, and modulation of mitochondrial function (Weitzberg *et al.*, 2010).

Nitrate supplementation, either as a sodium salt or as a natural source (e.g. beetroot juice), enhances exercise performance, both due to mitochondrial and extra-mitochondrial effects (Lansley *et al.*, 2011; Larsen *et al.*, 2011). Modified intracellular Ca<sup>2+</sup> handling was suggested as a mechanism by which increased nitrate intake may improve muscle performance (Bailey *et al.*, 2010). Accordingly, we recently showed an increased sarcoplasmic reticulum (SR) Ca<sup>2+</sup> release in muscle fibres of mice given nitrate supplementation (Hernandez *et al.*, 2012). The resulting increase in Ca<sup>2+</sup> caused an increased force production at submaximal stimulation frequencies. The increased SR Ca<sup>2+</sup> release was ascribed to increases in protein expression of the t-tubular voltage sensor, dihydropyridine receptor, and the SR Ca<sup>2+</sup> buffer, calsequestrin 1. Subsequently an increased force production at low stimulation frequencies was also observed with nitrate supplementation in humans (Haider & Folland, 2014).

Increased force production at low stimulation frequencies means that a given movement requires less drive from the central nervous system. Conversely, the same central drive will give a larger movement. Thus, physical exercise will require less mental effort. We are currently investigating how nitrate supplementation affects running distance and speed of mice having access to a running wheel.

#### References

Bailey SJ, Fulford J, Vanhatalo A, Winyard PG, Blackwell JR, DiMenna FJ, Wilkerson DP, Benjamin N & Jones AM (2010). Dietary nitrate supplementation enhances muscle contractile efficiency during knee-extensor exercise in humans. *J Appl Physiol* **109**, 135-148.

Haider G & Folland JP (2014). Nitrate supplementation enhances the contractile properties of human skeletal muscle. *Med Sci Sports Exerc* **Epub ahead of print**.

Hernandez A, Schiffer TA, Ivarsson N, Cheng AJ, Bruton JD, Lundberg JO, Weitzberg E & Westerblad H (2012). Dietary nitrate increases tetanic [Ca<sup>2+</sup>]<sub>i</sub> and contractile force in mouse fast-twitch muscle. *J Physiol* **590**, 3575-3583.

Lansley KE, Winyard PG, Fulford J, Vanhatalo A, Bailey SJ, Blackwell JR, DiMenna FJ, Gilchrist M, Benjamin N & Jones AM (2011). Dietary nitrate supplementation reduces the  $O_2$  cost of walking and running: a placebo-controlled study. *J Appl Physiol* 110, 591-600.

Larsen FJ, Schiffer TA, Borniquel S, Sahlin K, Ekblom B, Lundberg JO & Weitzberg E (2011). Dietary inorganic nitrate improves mitochondrial efficiency in humans. *Cell Metab* 13, 149-159.

Lundberg JO, Weitzberg E & Gladwin MT (2008). The nitrate-nitrite-nitric oxide pathway in physiology and therapeutics. *Nat Rev Drug Discov* **7**, 156-167.

Weitzberg E, Hezel M & Lundberg JO (2010). Nitrate-nitrite oxide pathway: implications for anesthesiology and intensive care. *Anesthesiology* **113**, 1460-1475.

# TRENDS AND ISSUES IN U.S. DOCTORAL-PHYSICAL EDUCATION TEACHER EDUCATION PROGRAMS

Hans van der Mars, Ph.D.

Arizona State University

#### **Abstract**

The growth of Sport Pedagogy as a sub-discipline in Kinesiology in the U.S. is reflected in the multiple research journal outlets available, the creation of Special Interest Group within larger education research association in multiple countries, and the increasing number of international conference dedicated to the sharing of research. Moreover, recent efforts by AIESEP to define Sport Pedagogy reflects a broad-scale effort to more clearly set the boundaries of what constitutes this type of research also face a number of threats.

Since the mid 1970s, the number of Doctoral Physical Education Teacher Education (D-PETE) programs in the United States has increased steadily from 4 to 26 in 2010. A recent Theme Issue of the *Journal of Teaching in Physical Education* (2011) focused on a first-ever analysis of U.S. D-PETE programs. It revealed the following key characteristics: a) The number of D-PETE graduates appears insufficient to meet the demand; b) Faculty members overseeing D-PETE determine their own program's structure and content; c) Certain key content areas are noticeably absent from most programs, including research on teacher education, physical activity, and policy-related matters; d) The dilemma of recruiting quality doctoral students; e) the lack of research productivity among D-PETE program graduates; and f) a perceived lack of quality among D-PETE position candidates by departmental search committee Chairs (van der Mars, 2011).

There are at least three key issues that D-PETE programs face in today's university climate. First, significantly reduced state support for state university system. This has resulted in the emergence of a decidedly corporate culture within universities (Bok, 2003; Hastie & van der Mars, 2014). Second is a fundamental shift in hiring practices by universities from hiring tenure-eligible professors to non-tenure eligible instructors and faculty associates whose sole responsibility is to teach, along with hiring tenure –track faculty whose prime focus is to secure external research funding that includes high amounts of indirect cost. And third, the increased dependence on using Impact Factors, citation indexes and the like as a primary criterion of quality of research, research productivity, and personnel decisions. The latter is receiving increased scrutiny relative to its inherent problems and the associated abuses (see *San Francisco Declaration on Research Assessment* [DORA] – www.am.ascb.org). These factors all directly influence the preparation of future PETE/Sport Pedagogy scholars.

First and foremost, the doctorate is accepted as a research degree. However, doctoral Education programs (including those in Physical Education/Sport Pedagogy) are responsible for preparing "stewards of the discipline", but also "stewards of an enterprise" (i.e., the preparation of new generations of teachers) (Golde, 2006; Richardson, 2006). This dual program goal then produces the following questions: a) What content and experiences should be taught in D-PETE programs? b) What are the desirable and tangible outcomes of D-PETE programs? c) How effective are those who teach in a D-PETE program in developing the skills, knowledge, and dispositions for becoming an effective PETE scholar? and d) What type of students should we be recruiting (i.e., what characteristics should we look for beyond typical program admission requirements?). Possible strategies for future directions in how to structure and deliver D-PETE programs will be presented.

# GLOBAL TRENDS IN LEISURE AND THE IMPLICATIONS FOR SPORTS MANAGEMENT

#### Ken Roberts

University of Liverpool and University of Chester

#### **Abstract**

Managing sport today presents additional challenges to those that were there in the mid-20<sup>th</sup> century, and most of the changes have occurred or accelerated since the 1990s. There was a time when managers in sport just needed enthusiasm for the games plus administrative and inter-personal skills. To these, nowadays must be added the ability to address markets. 'Which markets?' depends on the sport and the level of the individuals, teams, clubs and leagues with and within which the mangers compete. The second new challenge is that all sport managers today need to engage with the media. Again, exactly how depends on the sport, the level, the club and so on, but without media awareness and presence any present-day competitor is heading for the living dead.

Top sport has become part of the international entertainment industry, and managers of national sports leagues and other competitions need to sell their products in a global media marketplace where they compete against other countries' leagues and additional competitions in the same sport, other sports, and all other players in the entertainment business. Managers (not team coaches) of professional clubs are more likely than in the past to have owners who are seeking capital gains or, at least, to avoid losses. They must compete in capital markets as well as in their sports. Amateur clubs and leagues compete not just in the market for players but also against other forms of physically active recreation that are owned or sponsored by profit-seeking businesses which may be gyms or manufacturers or merchandisers of specialist sports goods and clothing for (usually non-competitive) lifestyle sports. Everyone needs a presence on the worldwide web whether this is to sell tickets or simply to advertise a club's existence. Managers in central government departments that distribute funds for and to sport are likely to have targets set by politicians: participation rates to be achieved, international events to be attracted to the homeland, and Olympic medals to be won. Managers at local and regional government levels are no longer simply distributing resources across public facilities. They are more likely to be awarding, and organising competitive tendering for, contracts, seeking best value, and the managers of the businesses that win the contracts and run facilities need to ensure that they deliver value that no competitor can match. Sport markets are segmented, but they enforce a similar business mentality and practices on all sport providers.

This is all very different from times past when managers of sport associations, leagues and other competitions simply had to enact the wishes of member clubs, when the management committees of amateur clubs had to maintain or hire facilities, keep finances in balance, recruit players, then set them on the field of play. It is still necessary, but it is no longer sufficient to love your sport and know your members. Managers need to play markets as well as their sports. They are all in the present-day business of leisure.

#### **EVALUATION OF MASTER ATHLETES**

## Mats Börjesson

Astrand Laboratory, School of Sport and Health Sciences & Department of Cardiology, Karolinska University Hospital, Stockholm, Sweden

#### **Abstract**

Regular physical activity will have an increasing importance in the future, as a counter-measure to the increase in life style related diseases, such as obesity, diabetes and cardiovascular disease. The rise in such "non-communicable diseases" is a problem for all health care, and not least in adult/senior individuals.

At the same time as sedentary time have increased in recent years, there has been a simultaneous upsurge in individuals >35 years, or older, getting involved in sporting activity, including competition (so called master athletes). Typically, this sporting activity include long-endurance events such as marathon running, cycling and cross-country skiing and even triathlon. Interestingly, master athletes seems to be getting older, and possibly less fit, as more and more people are being active at older age. The health care has a responsibility to recommend increased PA, while minimizing risks and maximizing the benefits. On the one hand, vigorous PA may have a higher effect compared to less intensive aerobic PA, for example on cardiorespiratory fitness, insulin resistance and lipid profile. On the other hand, we know that vigorous activity is associated with increased risk of SCD, especially in patients with underlying, possibly silent, cardiovascular disease.

What parameters should we take into consideration, when recommending the appropriate evaluation of adult/senior individuals willing to engage in physical activity and sports? The Section of Sports Cardiology, within the European Association of Cardiac Prevention and Rehabilitation, recommend, as first step, a simple self-assessment by the athlete, using for instance the PAR-Q (physical activity readiness questionnaire). If he/she ticks one of the boxes with "yes", they require further evaluation by a qualified physician, based on their habitual PA and individual risk profile.

In senior/adult individuals with an increased risk for coronary events (increased risk profile), maximal exercise testing (and possibly further evaluations) is advocated. Apart from aiding the detection of CAD, the exercise test should provide additional important information relating to individual fitness level.

## THE RELATIVE AGE EFFECT IN SPORT

Dr Susana Gil MD, MSc, PhD

Department of Physiology. Faculty of Medicine and Dentistry. University of the Basque Country (UPV/EHU).

#### **Abstract**

Most sports systems group athletes according to their chronological age. Thus, a selected date of birth, known as the *cut-off-date*, is used to group children into age-specific teams. This particular date of birth is the 1<sup>st</sup> of January in most European countries. In this way, the majority of sports teams are made up of participants born between the 1<sup>st</sup> of January and the 31<sup>st</sup> of December of the same year. Thus, a child born at the beginning of a given year will be almost 12 months older than another one born at the end of the same year. Nevertheless, they will play sports together.

The term *relative age* refers to a person's age relative to that of their peers within the same annual group. This characteristic depends on the date of birth *relative* to the selection data used to place a child in a specific age group. The variations in age within an annual age group have been referred to as relative age differences, and its consequence as the *relative age effect (RAE)* (Wattie et al., 2008).

As a result of the RAE, there is an overrepresentation of the participants born in the first months after the cut-off-date in many sports, particularly hockey and soccer (Cobley et al., 2009; Musch & Grondin, 2001; Wattie et al., 2008). But it has also been observed in basketball, handball, tennis, winter sports, rugby league, swimming and cricket. Moreover, it has been reported not only in Europe, but also in Brazil, Japan, America and Australia.

It has been well documented that the RAE is more relevant in high level teams. In this respect, the date of birth of 36-50% of highly selected and international soccer players was within the first three months of the year. On the other hand, not only skill level, but also age seems to be important in the RAE. Thus, the RAE appears to progressively increase with age from the child category to adolescence (Cobley et al., 2009), but studies undertaken in younger players have shown inconsistent results.

Physical and physiological growth and maturation have been hypothesized several times as the underlying cause of the RAE (Cobley et al., 2009; Musch & Grondin, 2001), but conclusive results are scarce. In a recent study, we observed that in a group of pre-pubertal soccer players, born in the same year, older players were taller and had longer legs. Moreover, they performed better in the physical tests (velocity and agility), and the difference was more evident in the overall performance score (Gil et al., 2014). In basketball, players born in the first months of the year were also found to be taller compared to those born towards the end of the year.

The importance of this issue is relevant for two reasons: on one side, children born at the end of the year will not have the same opportunities to be selected to play in higher level sports, on the other, from a more competitive point of view, there will be an inevitable loss of talent.

Some solutions have been proposed in order to alleviate the effect of the RAE, such as 1) to arrange the competitions based on the biological age of the participants, 2) change the cut-off-date every season, 3) to state a compulsory mean age in the teams and 4) to organize sport in shorter categories, for example of 6 months. Nevertheless, the final solution for this problem is still under debate.

#### References:

Cobley S, Baker J, Wattie N, & McKenna J. (2009). Annual age-grouping and athlete development: A meta-analytical review of relative age effects in sport. *Sports Medicine*, 39(3), 235-256.

Gil SM, Badiola A, Bidaurrazaga-Letona I, Zabala-Lili J, Gravina L, Santos-Concejero J, Lekue JA, Granados C. (2014). Relationship between the relative age effect and anthropometry, maturity and performance in young soccer players. *Journal of Sports Sciences*, 32(5), 479-86.

Musch J, & Grondin S. (2001). Unequal competition as an impediment to personal development: A review of the relative age effect in sport. *Developmental Review*, 21, 147.

Wattie N, Cobley S, & Baker J. (2008). Towards a unified understanding of relative age effects. *Journal of Sports Sciences*, 26(13), 1403-1409.

#### TALENT IDENTIFICATION IN SOCCER

Dr Susana Gil MD, MSc, PhD

Department of Physiology. Faculty of Medicine and Dentistry. University of the Basque Country (UPV/EHU).

#### **Abstract**

Soccer is the most popular sport in the world and consequently many children and youngsters play soccer, and also dream of becoming stars. On the other hand, the technical staff of professional soccer clubs develop different kinds of programs in order to identify those players who could benefit from specific training schedules and would potentially succeed in the club. Scientists have described four stages in the process of searching for excellence in sport (Williams & Reilly, 2000): *talent detection* (discovering of potential performers who are currently not involved in the sport in question), *identification* (recognizing current participants with the potential to become elite players), *selection* (on-going process of identifying players for inclusion in a squad or team) and *development* (providing players with a suitable learning environment to excel in the particular sport).

Several attempts have been made to identify the characteristics of talented young soccer players. In this respect, some cross-sectional studies have compared groups of players of different levels such as elite *vs.* non-elite or sub-elite players, to analyse the differences amongst these groups. It has been observed that elite players have less body fat and are taller than sub-elite players (Williams & Reilly, 2000). Also, many authors agree that elite players display a better performance in the physicals test and several technical skills (Vaeyens et al., 2006). Moreover, selected players exhibit better performance and ego orientation than non-selected players of a national squad; and they are also more mature (Figueiredo et al., 2009).

One of the limitations of these cross-sectional studies is that usually the groups that are compared do no train together, and they may have different training histories; therefore, many of the differences may come from the training status rather than from the actual talent. Therefore, longitudinal studies overcome this problem analyzing the outcome of the athletes after a shorter or longer period of time. By this means, it has been observed that differences in body size and functional capacity were observed among the finally achieved playing level (Gil et al., 2007; Gil et al., 2014).

Children during and around puberty go through the process of growth and maturation; and both play a major role in the identification, selection and development of young soccer players. In fact, there is a predominance of early mature boys in selected or high-level teams compared to the general population and also to non-selected soccer players. Similarly, late maturers are less represented in clubs where there is a selection process ongoing. In principle, this seems to be logical as early mature soccer players have greater body size, and also superior explosive, sprinting and endurance performance. However, when late maturers catch up with growth and maturation these differences are equalized. Unfortunately, for many late mature players the opportunity to be selected to play and train in high level clubs has already gone. Furthermore, coaches should be aware that the physical advantages related to the advanced maturity status during adolescence are largely transient and they are not a guarantee for success in the adult player.

On the other hand, it is well documented that there is an overrepresentation of players born in the first months and an underrepresentation of players born at the end of the year, particularly in highly selected teams or clubs (international squads, professional clubs...), which is known as the Relative Age Effect (RAE).

By this means, due to the contribution of the relative age, growth and the maturational status on the performance of the players, these parameters should be taken into account during the talent identification programs of young soccer players, in order to select the players with the greater potential to excel in the future.

#### References:

Gil, SM, Badiola, A, Bidaurrazaga-Letona, I, Zabala-Lili, J, Gravina, L, Santos-Concejero, J, Lekue, J, Granados, C. Relationship between the Relative Age Effect and anthropometry, maturity and performance in young soccer players. J Sports Sci 32(5), 479-86, 2014.

Gil, SM, Gil, J, Ruiz, F, Irazusta, A, Irazusta, J. Physiological and anthropometric characteristics of young soccer players according to their playing position: relevance for the selection process. J Strength Cond Res 21: 438-445, 2007.

Vaeyens, R, Malina, RM, Janssens, M, Van Renterghem, B, Bourgois, J, Vrijens, J, Philippaerts, RM. A multidisciplinary selection model for youth soccer: the Ghent Youth Soccer Project. Br J Sports Med 40: 928-34, 2006.

Williams, AM, Reilly, T. Talent identification and development in soccer. J Sports Sci18: 657-667, 2000.

# SOCIOLOGY OF SPORTS IN TURKEY: IS IT POSSIBLE TO SHAPE IT AS FIELD WITH NEW QUESTIONS AND NEW ANSWERS

## Ahmet Talimciler

Ege University Faculty of Letters Department of Sociology

#### **Abstract**

Sport is a dependent area which is affected all the way from the social relationships and the society we live in. Sports is dependent to the society in which it is done and is nourished by this society. When the property of sports as a social field is considered, establishing a bond with social life over sports strengthens and transfer of values becomes possible. Sports is a part of sociological integrity, based on this structure sports gains value as an essential area of sociology and turns into even more important activity type. We have the opportunity to examine the tiny miniature of social structure we are living in via sports. Here we can see many things such as actual power relations, interclass contradictions, differences, functioning of political structure, gender segregation, socialization, interclass relations-conflicts, methods of interclass belongingness and how actual economical logic works.

Sports was established independently for an ideal and dealing the conflict between ideal and disagreement, following all details in examining way is an intellectual activity of itself. Discussing sports in this way is to build a bridge between the past and today; today and tomorrow. Sports itself or movement culture creates the topic of sports sociology. The examination of sports and sports culture as a sub-discipline of sociology, in a definite social context is the research area of sports sociology. Sports sociology as a special field, transfers hypothetical paradigms of sociology to the sports process and it contributes to the formation of scientific language via obtained datas.

Sports sociology is rather a new field compared to other sociology branches. The approach to sports fact caused discussions between sociologists and physical education teachers who are in different diciplines, arising from the method of examining the topic. As PE teachers emphasize on the aim of doing sports and its techniques; starting from the social structure that sports is done, sociologists examine the relations between sports and social structure, how sportsmen and spectators consider sports activities and what kind of functions sports fulfill in society. The sports concept that sociologists focus on is inseperable part of culture. In shaping of sports concept, they consider the effect of ideological and cultural integrity as well as the conceptual relations of social integrity in which sports is done. According to Leonard who considers sports concept on basis of culture, social organisations, socialization, collective behaviours and relations with other basic corporations;

- "- Sports is a corporation which needs to be examined at least like other basic corporations.
- The interaction between corporations are valid for the interactions between sports and other corporations, this causes the occurence of a situation that complicates the sociological analysis of sports.
- -Sports organizes in a way to reflect the structure of society and to support prevalent ideology (Leonard,1998)". According to Voigt who suggests that sports sociology is very new and its identity is recently formed, sports sociology is special branch of sociology. It is an experimental science branch that examines systemmatically the various scopes, different sides of sports and because of this it uses empirical methods. "Sports sociology at the same time researches social structures and social behaviours in sports with social effects of sports by cooperating with other sciences in the light of specific concepts (Voigt,1998)".

Sports sociology compared to other sub-diciplines of sociology, is relatively a new studying field in the world. Besides in Turkey the value given to sports is rather lower than the value given to other social corporations, unfortunately sociologists for long years leave this very important field that involves whole society to the hands of physical education teachers. This situation ended up with inefficient studies and mostly studies far from being scientific. In sports sociology in Turkey, reading

original comments or experiencing a real critical approach at the end of real reasearch were kept away. On this, the effect of most people claiming to be an expert in this field despite not having any academical sociology education and their continuous transition to various specialities such as sports psycologist, sports sociologist, sports management etc during their carrier depending upon conjuncture, is extremely much.

Why is Sports Sociology an Important Field?

Starting from sports is an ideological field, it is notable that competence sides make their changing proposals over sports/football. Sports sociology, precisely at this point, is a sub-dicipline of sociology that focuses on the problems encountered in sports, besides its importance and place in social life. The legalising function of sports in ideological means is not only worth to be examined in continuity of competence but also in gender segregation and its contribution to the continuity of male hegemony. The support of sports to the production of male hegemony world and its effect in the formation of gendered language after this support can only be possible by examining sports in terms of sociology. Media plays a mediator role in expanding gendered ideology by transferring this masculine language to the masses that was created over sports. After examining sports-media relation in critical perspective, it is possible to obtain how sports is narrated over media in sociological term and what these ideologic mediators are.

Although sports is in social life, it creates an impression as if being an outside world in terms of its functions. In fact it is not an independent field from the social relationships and the society we live in. Besides it provides to make this hegemon power relations unseen via media, it also provides a suitable environment to recreate them. Sports is a period that is fed from and dependent to the society in which it is done and sports sociology is the one to find out which stages this period involved and how this period routed.

By considering the reality of sports is the part of social integrity in which it is done, sports sociology also focuses on bodily processes as well as gender segregation in sports, place and importance of sports in production of male hegemon value judgements. Because as a sociological element, it is a matter of proposing body and bodily processes like healthy-unhealthy, beautifulness- ugliness etc. over sports. In new sports ideology which stands on "No body is Perfect" concept, sports halls turn out to be the essential places of capitalist economy.

The prior field of interest of sports sociology is to obtain the underlying reasons of violence encountered is sports fields and to develop approaches for solutions. The way to obtain the measures of violence properly is to be searched within the social structure. Otherwise it is inevitable that the approaches developed for the solution of problems will be helpless in a short time. Sports sociologists focuse on how violence routes in social structure and how it reaches to sports fields. This kind of approach will cause wider perspective to be applied to sports fields in prevention of violence.

Understanding sports better and obtaining its transition period does not only concern in terms of sports and sports activities but also every region of social structure closely. Sports is not a monolithic field that is independent from the society in which it is done. The actual transitions, deformities are also reflected to sports field. Every kind of event from economical crisis to differentiations in political ideologies affect sports organisations and perception of sports directly. That is why, all the researches to be done on sports involving values concerning wholeness carry a great importance for researchers. The researchers who are dealing with sports sociology, try to obtain some implications relating social transition by starting from theoretical paradigms of sociology. The importance of sports from the point of sociology generates from actual human activities, presenting datas about consisted groups, organisations, social order and structure and function of social behaviours as well as large masses take role in sports as spectators or actively Table. The Sociology of Sports, the Sports of Sociology (Talimciler, 2011)

Values Norms

			x, 07744444	
System of Meaning		ngs System	System of Meanings	
	MANAGER TRAINER SPORTSMAN CLUBS SPORTS POLICIES OF GOVERNMENT	SOCIOLOGY (TRANSITION/DIFFERENTIATION)	SOCIETY SUPPORTER MEDIA ECONOMY SPORTS IDEOLOGY OF GOVERNMENT	
THE SOCIOLOGY OF SPORTS THE SPORTS OF SOCIOLOGY				

The sports of sociology seems to be a more technical field involving managers, sportsmen, clubs and sports policies of government. On the other hand, in the sociology of sports besides society itself, supporters, media, economy, the sports ideology of government take part. In both fields there is system of values and both fields are continuously affected from eachother. The actual transition or differentiation period on one side is felt on the other side and causes the formation of a new synthesis in a short period. When we place sports-sociology relation on this frame, it can be possible to show what the transferred values to social life over the changes taken place in sports, in the same way how changing period in social life echoes in sports.

The reality of both fields do not have constant structure, quite the contrary it is always in activity and procession provides us to comprehend why sports and sociology are inseperable unity. For example after togetherness of football and television, there happened great transitions in structure of football as a game. There was a series of differentiation starting from the renewal of stadiums to supporters transition to customers or spectators. After increase of sponsorship and advert incomes, there experienced changes starting from management organizations of football clubs to class states of footballers and these experiences evoke its effects in social life.

#### Result

Values Norms

Sports is one of the most important elements of social life and in our country unfortunately the sociological dimensions of sports are kept in the background. However the regulations can be actualized that provide to reach social life and individuals to make this life real over sports as well as provide individuals being citizens integrated with firstly their families then with their cities, countries and lastly with the world. At this point, undoubtedly researchers will be needed who know sports and society well. Here the key concept is, the reality of sports is not activity types that involve only training and racing but it involves not less, even more of these. Sports is a field that is shaped socially and you can reach the reality over sports what kind of society you want. If we consider obesity problem is more caustic and the proportional distribution of elderly population increases in the following years, it can be seen that it will be more important to meet sports with social life in terms of our country.

Actualizing the regulations that make all the stages of social life doing sports, are inevitable necessity for planned targets. Because the way for our people to live more happily and healthy, will be provided by taking sports into life at every age group. For social politics that make all the people such as disabled, old, poor outsider from every social position and age doing sports, being of sports sociologists in more fields, will provide a great benefit.

The sociological researches that support different kinds of sports particular to different parts of our country as well as the sportsman profiles that are trained with these kinds, will constitute the substructure of prepared policies. Obtaining sportive policies regarding children, teenagers, women, old people and disabled and actualizing sportive organisations accordingly, carry an importance in terms of both today and the future. In order to establish a country in which sports is not only football and which sports is not perceived an activity of spectator level, we need more researches to reach the people in the country.

Since we perceive the concept "Fair Play" as a concept in sportive activities, we could not somehow explain the reality how the changing face of social life got rid of this concept in sports fields. For example we could not realize the increasing destruction within the country created by the violence encountered in football fields. However this concept was not only related with the game; we could not understand this concept means more fair, more equal and more tolerant to social structure. The most loved game of our country football conduced to be experienced a course in which violence and intolerance evoke themselves more and speeded up our segmentation period over teams. The studies that sports sociology make on violence in Turkey will not only involve violence in stadiums/sports fields but to find out the roots of violence in social life and to share the methods is solving these problems with the public.

The sports sciences in Turkey, when the circumstances of country are taken into consideration, are under the influence of the current life and keeping its bonds with government tightly by being caught under the decisiveness of international fields and being away from the position which can criticise the approaches of government to the sports. The way getting sport sciences from localness to universal cannot be done by preparing English summaries or presenting manifestos. There needed pioneer-creative researches that presents specific conditions of the country. In a social structure where violence is lived at full speed, almost whole quotations of violence research of our country are given to foreign sources as a reference, cause the behaviour patterns of violence that are particular to us not to be understood and also cause this situation not to be presented scientifically.

The sports science and sports scientists of this area are supposed to question where sports is standing and which approaches are affecting this stand in our social structure. Also they have to take a pioneering role in many subjects from the relation between sports science and government, unlegal organising in sports, incentive pay to using of sports(football) by powers. They have to have new questions and answers, beyond these they have to keep the place of sports on the agenda in our social life. Here because of this and similar problems sports sociology in Turkey especially the studies that will be done on football, is such as to light the country. Sports sociology is the most general language of football and yet it does not use its right to speak.

## References

Leonard, W. (1998) A Sociological Perspective Of Sport, Allyn&Bacon, Illinois.

Talimciler, A. (2010) The Sociology of Sports The Sports of Sociology, Bağlam Yayınları, İstanbul.

Voigt, D. (1998) The Sociology of sports, Narr. Ayşe Atalay, Alkım Yayınları, İstanbul.

# AN EYE ON THE FUTURE! HOW SPORT PSYCHOLOGY CAN BE APPLIED TO ADDRESS A GLOBAL HEALTH PROBLEM. THE PAPA PROJECT - A LARGE SCALE, EU FUNDED, COLLABORATIVE INTERVENTION PROJECT TO PROMOTE ADOLESCENT HEALTH THROUGH PHYSICAL ACTIVITY

Professor Howard K. Hall PhD York St John University, UK

It is well recognised that childhood obesity is a problem of global proportions, and that physical inactivity is implicated as an important contributor. While organised youth sport can help by providing a context for children to be active, it is notable that many children become disaffected with sport and drop out by the time they reach adolescence. Research has found that the climate created by coaches, parents and teammates is an important determinant of both sport participation and attrition. Therefore, intervening to facilitate the development of empowering climates may not only aid sustained sport participation, but encourage children to adopt healthy lifestyles as they progress into adulthood. This presentation describes the four year European Union (EU)-funded (FP-7) research 'PAPA' project which involved customising, delivering and evaluating a theory- and evidenced based training programme (Empowering Coaching<sup>TM</sup>) for youth sport coaches across Europe. Researchers from the United Kingdom, Norway, Spain, France and Greece partnered with football associations in the 5 countries to train coach educators to deliver the Empowering Coaching<sup>TM</sup> workshop to grassroots coaches at community football clubs. In total, 1,159 grassroots football coaches were trained and data were collected from almost 8000 children, aged 10-14, whose coaches either took part in the Empowering Coaching training workshops or received no training beyond the standard FA provision. Measures of players' perceptions of the coach-created climate, need satisfaction, behavioural regulation, motivation to participate, self-esteem, enjoyment of football, and intention to continue or dropout were assessed on three occasions at the beginning and end of a season and at the start of the following season. Preliminary data analysis indicates that when coaches create empowering climates, the environment is associated with greater need satisfaction, more self-determined motivation and a positive sporting experience, whereas disempowering environments are associated with amotivation and subsequent drop out. Preliminary data analysis also demonstrates that the coach training programme had measurable effects. In the five countries involved in the research, children who played for trained coaches felt that they were playing in a more empowering environment, reported low intentions to drop out and experienced high intentions to continue playing the following season. The evidence to date indicates that the empowering coaching intervention holds great promise as a means of facilitating high quality motivation in children and promoting healthy and sustained engagement in physical activity.

## SPORTS AND PHILOSOPHY IN TURKEY

## H. Attilla ERDEMLİ İstanbul University, TUR

#### **Abstract**

Sports, in a modern sense, in Turkey went back to the reformist movements starting with the Tanzimat. Although, it is been more than a hundred years since then, it cannot be said that sports in Turkey has reached to a level which fulfill the needs of Turkish people. The more important and critical aspect of this situation is that: it cannot be said Turkish people need sports. It is even hard to say that there is a specific and common Sports Awareness within the society. Moreover, there is a slight Sports Awareness among the ones getting involved in sports.

When we look at the history of Philosophy in Turkey, we see a similar situation. Philosophy has also been developed ever since the Tanzimat. Nevertheless, the situation becomes harder, when it comes to Philosophy. Sports have not been involved in, because of the fact that it has not been considered as valuable and even been underestimated. Philosophy has not been involved in, because it was thought that it was dangerous. Hence, it has been mostly studied by a minority of university teachers. There was not a clear and common sense of philosophy within the society.

Thus; it was extremely difficult to combine Sports and Philosophy, since one was seen as worthless and despised and the other was seen as dangerous and objectified.

In 1992, the Faculty of Letters of Istanbul University and Turkish-German Culture Center decided to organize a Philosophy of Sports Symposium and started to work together. National Olympic Committee of Turkey, General Directorate of Youth and Sports, Turkish Sports Writers Association and Adidas were among the sponsors of the Symposium. This is how the first step was taken for Philosophy of Sports in Turkey. The first step was big, but the further steps were uneasy and hampered. In Turkey, neither sportspeople and even sports scientist, nor philosophers has understood Philosophy of Sports well. Certainly, there were some philosophers and sports scientists who were approaching it in all seriousness, but they were few in number.

What is Philosophy of Sports? When we start answering this question by searching for the answer of "What is Sports?"; we start doing Philosophy of Sports. In this inquiry, we face with a vast majority of questions, some of them tracking each other; some of them developing in each other. Sports is a multi-disciplined field. As Philosophy of Sports has to cover sports completely, it is interested in any aspects of sports and all of these studies fall under in one and only concept: Sporting Human Being. Philosophy of Sports is the philosophy of this human being. On the other hand, Philosophy of Sports is a Philosophy of Humanity.

#### THE INFRASTRUCTURE OF THE TURKISH FOOTBALL SYSTEM

#### Deniz Gökçe

Bahçeşehir University International Finance Department

#### **Abstract**

What must the football revolution include?

Those who want to approach the topic football scientifically, must say: "To discuss our situation we must first examine the world and then Turkey."

In football, there are 5 main principles to create an attempt throughout the country. The first is to have a young football players' sub-league. The second principle is to have enough trainers for the young players. The third is not to have greedy club managers, namely, Professional management is important. The fourth principle is that club teams should stop wasting big amounts of money on old and retired foreign players so that young players can hold the line and improve their skills. The fifth principle is that the financial conditions of the clubs should be strong.

In the condition that a considerable assessment should be done, none of our teams and therefore football in our country does not match any of these principles. Let's take a look abroad.

Germany, the Bundesliga, is a country which started a football revolution and reached success in time. Although England is the country which discovered football and its 'Premier League' being the most powerful and also containing the best foreign players has collapsed in many aspects. Let's compare these two countries.

How does football revolution start? Initially a national business plan and long period patience is required. None of the German football teams played semi-finals in the Champions League between 2003-2008. The Bundesliga was drawn fairly back. The German national football team performed badly in the 2000 European Championship. According to the April 2013 explanation of the head of Bundesliga, Christian Seifert, since 2001 the German teams have spent exactly 930 million dolars on the junior league with the leading of the German Football Federation. In the 2012-2013 season the German football league income was 2.44 billion dolars and the german teams spent 4.4% of this fund, approximately 100 million dolars on the development of the young players. The expected results of these investments came true after years. Bayern, winning the champions league cup in 2013 and then the German national team winning the 2014 World cup was not a surprise. After exactly a 13 year-investment success and championship cups were on their way.

The English are questioning how it is that they are left behind in a sport that they had discovered themselves. The reality is quite clear. With regard to the 2013 present data, in Germany there are 28400 trainers with UEFA B license, while there are only 1759 in England. In Germany there are 5500 technique coaches working with the UEFA A license, while this number is only 895 in England. The number of german technique coaches owning a Professional team license is 1070 and only 115 in England.

The German clubs spend only about 34% of their incomes on players' fees. This rate is between 50-70 % in the English, Spanish and Italian leagues which are based on players' transfer. Therefore, the economy of football is also corrupted.

These five principles must be considered and understood and then a football revolution must begin patiently in our country.

# THE CONFIGURATION, ECONOMIC DEVELOPMENT AND PROBLEMS OF TURKISH FOOTBALL

## Tuğrul Akşar

Turkish football is in a position of creating the seventh largest economic income in Europe, with an income of about 600 million Euros. Particularly, the financial power that the Super League has reached in the last 14 years has made it compete with the European leagues financially.

On the other hand, the Super League, with the value of 958 million Euros over the striving 18 teams testimonial price, has gained seventh position in Europe.

The financial development of the Super League, has also improved the investment of sports facilities. Especially, it has not remained behind its European competitors with its luxurious and high seat capacity stadiums, fulfilling the requirements of Industrial football and allowing the increase of value per seat. In fact, the facilities can also be considered to surpass the rivals.

The financial development in Turkish football, however, has not brought along the administrative development. Specially, as significant increments in club incomes are occuring, in managerial aspects, the clubs still being supervised with conventional management types, has pre-cut our clubs to proceed in sportive performance.

Thus, as the Turkish football financial resources increasing 356% - 600 million Euros, in the last 14 years has not provided sporting welfare and success. However, Turkish football, although receiving new financial opportunities in the past 14 years, has yet not been able to reach the grades it had reached in the UEFA and FIFA rating in year 2000. Today, the point of Turkish football in the UEFA and the FIFA ranking has fallen behind that of year 2000.

Since the potential, capability pool, and financial power of Turkish football has not reached an administrative restructuring in which it could meet the requirements of industrial development and transformation, it has encountered vital difficulties in sense of sports, economics and finance.

# PHYSICAL EDUCATION TEACHERS' ATTITUDES TOWARD CHILDREN WITH DISABILITIES

## Dilara Özer

Faculty of Sports Science, Gedik University, İstanbul-Turkey

#### **Abstract**

The integration of children with special educational needs in regular schools has gradually become a key topic in special education over the last half a century (Avramidis et al. 2000), with preliminary contributions of scholars such as Johnson (1962) and Dunn (1968). Since the late 1990s the term "inclusion", which embodies a whole range of assumptions about the purpose and meaning of schools (Kliewer 1998), has superseded the previously used term "integration" in the vocabulary of special educators. In contrast to integration, inclusion implies a restructuring of the educational environment to accommodate the needs of a small number of children with significant disabilities (Thomas & Vaughan 2004; Florian 2008; 2009). It promotes self determination and participation of individuals with disabilities as any other minority in the community (Hutzler et al. 2005; Reid & Stanish 2003). While some authors question full inclusion (e.g., Kauffman, 2005), most would agree that the principle of inclusion and appropriate placement within an inclusion delivery system should be considered as a right of children with disabilities. Several United Nations policies affirm the right of all children, including those with a disability, to be valued equally, treated with respect, provided with equal opportunities within the mainstream system, and experience full and effective participation and inclusion in society. These include the UN Convention on the Rights of the Child (1989), the UN Rules for the Equalization of Opportunities for Persons with Disabilities (1993), the UNESCO Salamanca Statement (1994), and most recently the UN Convention on the Rights of Persons with Disability (UN ENABE), in which Article 30 specifically refers to physical activity within formal and informal educational institutions. For the past 25 years inclusion has increasingly been discussed within the physical education (PE) literature, addressing experiences and methods of including children with and without disabilities within general PE contexts in different countries, but mainly in North America (e.g. Block & Vogler 1994; Sherrill Heikinaro-Johansson & Slininger 1994; Block 1998; Goodwin & Watkinson 2000; Lienert et al. 2001; Place & Hodge 2001).

An attitude can be defined as a generalized positive or negative evaluation people may have toward any object (e.g., individuals or groups of people, events, activities, and ideas), which predicts behaviors toward these objects (Ajzen & Fishbein 1980). Teachers' attitudes affect how classes are conducted and how the new demands and opportunities that inclusion provides are responded to (LaMaster et al. 1998). A rich body of literature has been established during the past two decades on attitudes toward including students with a disability in PE, emphasizing the importance of positive beliefs (Block & Obrusnikova 2007) and, the attitudes of PE teachers on the success of inclusion (Tripp & Sherrill 1991; Sideridis & Chandler 1997; Duchane & French, 1998; Hodge et al. 2004; Hardin 2005). Predictors of attitudes toward teaching students with disabilities in PE have been proposed and studied, including (a) coursework taken by the teachers on students with disabilities (Rizzo 1985), (b) age and gender of the teachers (Rizzo 1985), (c) their perceived competence (Rizzo & Wright 1988; Rizzo & Vispoel 1991), (d) their specific knowledge and instructional skills (Heikinaro-Johansson & Sherrill 1994; Kowalski & Rizzo 1996; Lienert et al. 2001; Sherrill 2008), and (e) their personal experiences with individuals with disabilities (Rizzo & Vispoel 1991). However, current research has revealed inconsistent outcomes with regard to the impact of these predictors on PE teachers' attitudes towards individuals with disabilities.

In this study, some studies on PE teachers' attitudes and effecting factors on attitude are reviewed. Suggestions are given to PE teachers related to improving attitudes.

#### THE PLACE AND IMPORTANCE OF SPORT FOR ALL IN TURKEY AND THE WORLD

Prof.Dr. Erdal Zorba

## Board Member of TAFISA and FISpT

President of Balkan & Turkey Sport for All Federation

Faculty of Physical Education and Sports, Gazi University, Ankara/TURKEY

#### **Abstract**

Sporting activity, both elite and community-based, is very crucial to the vitality and productivity of every society. All ages, races and ethnic groups, all skill levels, each social strata and both sexes share the interest and the opportunity to benefit from active participation in sport, recreation and cultural activities. All sports for all agencies have common principles in their objectives. Alpha

They aim to promote active participation in sport for all activities and the idea of volunteering in the administration, maintenance and support projects, programs and events that promote a unique network of sport enthusiasts and sports create for all participants. Sport for all knowledge has a great relationship with the Olympic idea and movement. Sport for All is a movement promoting the Olympic ideal that sport is a human right for all people regardless of race, social class and gender. The movement encourages sports activities that can be exercised by people of all ages, both sexes and different social and economic conditions. Sport for All helps to put the Olympic Movement's values into practice in terms of promoting health, education and well-being through sports activities practiced by all categories of the population without distinction.

In the light of this brief information, Turkey Sport for All Federation is the main responsible foundation to carry out all processes for Turkey population since 1990. Under the umbrella of Turkey Sport for All Federation, this movement has recorded an important development during past 30 years. For 30 years, the federation has changed its activity and established very strong relations with international sport for all movements. Just after a very short period, the federation was involved in a series of important international projects; hosted the foundation assembly of Balkan Sport for All Association in 2010 in Istanbul, and two international Balkan SFA festivals respectively in Edirne (2010) and in Bodrum (2011); carried out exchange programs with Korean SFA Council, Romanian, Tunisian and Bulgarian SFA Federations; and two international scientific conferences on sport for all topic in Antalya (2009 & 2012); etc. As a result of this active international policy, Balkania SFAF had managed to receive board membership in the two global SFA organizations; TAFISA and FISpT.

For the following term, SFA is planning to establish more stronger and sustainable financial resources in order to support whole elite sport and SFA movements all over the country, and continue to be an active organization on international scale exchanging experience and information with all counterparts in this field.

Within this frame BSFAF has two main targets in order to turn out to be an effective and widely-known organization in both national and international frame which will be discussed in this presentation:

- Institutionalization: to complete its organizational identity within the rules of good Turkey and TAFISA policy.
- Internationalization: to establish stronger relations with international counterparts especially in TAFISA.
- Turkey annually organizes labour games, and so many participants out of Balkanian countries take part in these games.

- Wellness, Yoga and Hemsball courses should be organized. Scientific congresses or organizations should be mutually arranged.

In the light of this brief information, TAFISA began in the 1960s as the semi-regular gathering of international but individual personalities and leaders interested and working in the field of Sport for All, under the title 'Trim and Fitness'. At the time, Sport for All was a little known concept. The Association for International Sport for All (TAFISA) has formally been in existence since 1991, and informally dating back to 1969. In this time, through the commitment and drive of the Board and other members, development of successful Sport for All programs, international recognition of key TAFISA personalities. TAFISA has grown to become the leading international Sport for All and physical activity (SAPA) association in the world. Sport for All organisation, TAFISA is in the privileged position to bring joy, health, social interaction, integration and development to communities and citizens around the globe through the promotion of Sport for All and physical activity. TAFISA's primary focus is on: Lobbying internationally for Sport for All, Providing and coordinating programs and events, Providing networking and experience transfer platforms. To this end, TAFISA: Believes Sport for All & physical activity are basic human rights, Supports promotion/development of traditional sports and games, Sees Sport for All as a major contributor to individual, social, community and national life quality, Supports international exchange and Supports education of leaders, Cooperates with health, culture, education and recreation, Assumes political leadership and provides practical events and programs, Supports diversity, inclusiveness and member development.

For the following term, TAFISA is planning to establish more stronger and sustainable financial resources in order to support whole SFA movements all over the world, and continue to be the leader organization on international scale exchanging experience and information with all counterparts in this field.

Apart from TAFISA, there are some other SFA organizations working on regional or global scale. One of these organizations which are also listed / recognized by IOC is FISpT, which had been much more effective during 80s and 90s, but totally lost its power during the last 10 years. And another one, CSIT, is also listed / recognized by IOC as global SFA association, but more specifically concentrated on the specific area of workers' sport.

In this presentation, we are going to discuss the leading position of TAFISA in SFA sector, and its mission, vision, priorities, projects, and targets.

## **NUTRIGENOMICS AND EXERCISE**

H. Hüsrev Turnagöl

Hacettepe University Faculty of Sport Sciences, Department of Nutrition and Metabolism in Exercise, Ankara, Turkey

#### Abstract

Nutrition is one of the most important lifestyle factors affecting health and sport performance. However, studies have shown that various foods affect individuals differently. Not every dietary regimen, food or supplement is beneficial for everyone. For example caffeine ingestion improves performance in some individuals but not in others. Identification and mapping of more than 20,000 genes by the Human Genome Project (HGP) has led to an extraordinary revolution in medical research. Although the related research has focused on mainly how genetics is associated with illness and diseases the number of studies on food-gene and exercise-gene interaction is increasing which may change the future of sport nutrition and training for sport performance.

Nutrigenomics is the science of how bioactive chemicals in foods and supplements alter the molecular expression and/or structure of an individual's genetic makeup. This information can be used to determine the specific nutrients and type of diet a person needs to prevent disease, improve health and sport performance. Thus, designing personalized diets and training programs based on a person's unique genetic makeup will replace the current approaches of sports training and sport nutrition. "Eat according to your genes" takes "personalized nutrition" to a whole new level. Individually designed diets and supplement regimes that take into account one's unique athletic goals and genotype will improve the optimization of sport performance.

A growing body of evidence also supports the notion that response to exercise training may be influenced by genetic variation. More than 300 exercise-related genes have been identified. These genes range from those affecting cardiovascular endurance, muscle power and strength to those related to heart rate, body composition, blood pressure and metabolic factors, such as how the body clears lactic acid and uses carbohydrates and fats. Moreover, there is evidence that specific genetic profiles may be very responsive to one particular type of exercise program and nonresponsive to another. Elucidation of how variation in genes and how the interaction between genes and environmental factors like dietary intake may influence the variability observed in physiological changes resulting from exercise training will improve our understanding of variation in responses and adaptations to exercise training and will lead to the development of individualized training programs and nutritional regimens according to genetic makeup. A personalized training program designed to work with one's unique genetic makeup as well as environmental factors may increase the ability to reach one's full athletic potential.

By using the evidence-based science from the emerging area of personalized and population-level genetic research the necessary tools to develop personalized programs can be created. These tools will allow sports science professionals and practitioners to collaborate in a multidisciplinary team approach to improve optimal health, fitness and athletic performance.

When the personalized nutrition is integrated into routine practice, we can determine the effectiveness of various training diets and nutritional supplements and help athletes choose the right supplements more precisely to optimize health and performance.

# THE PROBLEMS AND SOLUTION PROPOSALS IN THE PROCESS OF ASSOCIATE PROFESSORSHIP IN SPORT SCIENCES

## Mehmet Akif ZİYAGİL

Ondokuz Mayıs University, Yaşar Doğu Faculty of Sport Sciences, 55139-Samsun-TURKEY

#### **Abstract**

There are 392 faculties, 173 research assistants and 475 lecturers and totally 1040 teaching staff in sports training faculties in Turkish Higher Education in sports sciences according to the statistics of student selection and placement center (OSYM) in Turkey, which was in the 32nd place in London Olympic games with the lowest rate of participation in sports and physical activities as 3,5 % among the European Countries.

It is stated in the special specialization report on sports, which was prepared for 2014-2018 10th Development Plan of Ministry of Development that insufficient number of faculties in terms of quality and quantity that is one of the problems for sports training in Higher Education reduces the competitiveness of these Higher education institutions in the World.

The most important process in reaching the high standards for faculties is the way to Associate Professorship. It is important to assign jury members who have publications in indexed journals in recent years in addition to various numbers of publications and educational activities. It is believed that Associate Professorship sub commission in sports sciences should be formed from the members with high credentials in terms of scientific proficiency and assessment.

The core article with a single author should research the relationship between uninvestigated objects and thoughts, reveal ordinary results by an extraordinary method, be different from other studies in terms of results, population, and method, identify and illuminate new and updated problems, be a unique or original one instead of writing and publishing an article in a foreign language.

# HOW WILL THE SCIENCE OF SPORTS AFFECT HEALTH CONFIGURATION IN THE FOLLOWING YEARS?

## Sanlı Sadi Kurdak

Çukurova University Faculty of Medicine, Department of Physiology, Sports Physiology Department, Adana, Turkey

#### **Abstract**

Besides the changes seen in the lifestyle of modern people and their eating habits, the extension of the average lifetime has recently urged the world of medicine to argue on a new reconfiguration in a philosophical sense. The efforts to be brought to people in respect of the habits concerning sustainable changes in form of life have emerged in result of this intellectual approach. It is possible to decelerate and in fact prevent the physiological changes observed during aging with regular physical activities. Therefore, exercise has a significant role in increasing the quality of human life. Considering the immobile lifestyle in reference with the prevalence in the world it will not be wrong to define it as a pandemic tableau. As this adverse situation gives rise to unstoppable health problems, it also becomes the source of incalculable social problems and economic decrements. One of the common conclusions that are reached during the discussion of politics on health structuring, is that in terms of society health, preventive medicine has a more satisfactory result than those of medicine for treatment.

It is stated that according to the results of the pathologies that were examined with the title 'Non-communicable diseases' the 6-10% of the deaths are due to sedentary lifestyles. It is highlighted in the data of the World Health Organization that the main reason of 25% of breast and colon cancer cases, 27% of diabetes cases and 30% of ischemic heart disease cases, is sedentary lifestyles. Considering the condition in Turkey, having determined 70% of the population over age 12 not taking exercise, illustrates the greatness of the danger we will face. To implement the precautions that must be taken in advance is an obligation.

Unhealthy eating habits and immobile lifestyle, having a direct contact with the mentioned diseases above, has made the authorities discussing general health policies do their assessments also taking this topic into consideration. The data germinating recently in the World and Turkey has created ground to being discussed and studies that will change health policies through Turkey in detail have started. Having published the physical activity guide of the Ministry of Health, should be considered a benefit. One of the underlined principles is the need of the participants' active and effective participation for the system to be successful. The physical activity programs prepared with purpose of protecting human health or contributing to the treatment of the diseases are generally defined as 'exercise remedies'. The drugs used in treatment of the diseases are prescribed in traditional medical practices. Likewise, to achieve in the exercise practices aiming treatment the basic variables such as the duration, severity and frequency of the exercise must be observed. It is true that in many medicine faculties a broad and standard education on this issue does not take place even at a bachelor degree.

The adoption of physical activity as a lifestyle among people is one of the main targets of the policies on the issue. The expert groups which will prepare and apply the exercise remedies on to the patients whom physical activities might benefit, have been defined. On the other hand, considering the population and patient number together, the number of experts defined within the profession groups, may not be sufficient to meet the requirements of the exercise practices. At this point sports scientists', who have examined and practiced sports throughout their education, taking responsibility in the restructuring of medical care in our country must be present to discuss. This statement may at first sound ridiculous, but if formed well, may be the beginning of a realistic approach. It is high time that the sports scientists should talk on the conditions for institutional cooperation. Probably, a new understanding that will help the society gain a habit of an active lifestyle will be developed within this frame.

# INNOVATIVE PHYSICAL EDUCATION AND HEALTH WITH LINKAGE TO THE COMMUNITY THROUGH INTERACTIVE TECHNOLOGY

Prof. Dr. Ming-kai Chin

Former President, ACESS
Vice President, Global Affairs & Research
HOPSports, Inc.
USA

#### **Abstract**

Physical education in the past four decades has undergone a transition from a profession with an emphasis on traditional sport skill acquisition to one with a broader emphasis on health related fitness and lifelong physical activity. During the same time period, the epidemic of overweight and obesity has world-wide implications and rapidly emerged in developed countries and is now emerging in developing countries. Not only are incidences of overweight and obesity prevalent among children and youth, it is now reported, according to recent estimates from the International Obesity Task Force, one in every four individuals world-wide, is either overweight or obese. A major contributing factor to this issue has been shifts in both the dietary and activity patterns of individuals. This paper would present two parts by drawing the linkage and application of a holistic health and physical education model and interactive technology as one of the possible means of combating global epidemic of overweight and obesity. The first part would concentrate on a discussion of the connections between child and youth overweight and obesity and physical activity, diet, and physical education by using model schools illustrations in Hong Kong and Singapore. The two model school programs were included as the key presentations at the 2014 Global Forum for Physical Education Pedagogy (GoFPEP 2014) in North-West University (NWU) in Potchefstroom, South Africa.

The second part would stress the role and importance of interactive technology within the holistic model of health and physical education. Through 21st century technology mediums, children experience a variety of sensory distractions which enable the repetition of standards-based sport and fitness skill development. Kids may simultaneously watch wellness-themed animated videos, choose modern music, or learn valuable educational and social messaging while increasing their moderate to vigorous physical activity (MVPA). Educators can no longer ignore the growing body of research on the connection between exercise and brain activity that shows that, even moderate exercise will, among other things, supercharge mental circuits to fight stress, sharpen thinking, and enhance memory. Consequently, innovative and creative technology mediums such as HOPSports can assist to fight the childhood obesity epidemic and accelerate learning through integration of math, science, art and music by enhancing cognitive focus for optimal classroom learning. In this presentation, interactive technology will be used to demonstrate active living through the global Omniversity Model and Brain Breaks. Emphasis will be on the importance of involvement of all teachers, parents and stakeholders of the school to have a better understanding of the current trend and gaining their support.

# ORAL PRESENTATIONS MOVEMENT AND TRAINING SCIENCES

### OP. 6 THE EFFECT OF TWO DIFFERENT 8-WEEK WALKING PROGRAMS ON ENDOPLASMIC RETICULUM STRESS MARKERS AND INSULIN RESISTANCE IN PRE-MENOPAUSAL WOMEN

<u>Yeliz Doğru</u><sup>1</sup>, Gürbüz Büyükyazı <sup>2</sup>, Cevval Ulman <sup>3</sup>, Fatma Taneli <sup>3</sup>, Hakan Tıkız <sup>3</sup>, Mehmet Göral <sup>1</sup>, Hasan Esen <sup>1</sup>

#### Abstract

**Aim:** The relationship between endoplasmic reticulum (ER), insulin resistance and obesity is a new field of research. However, there is limited number of studies examining the relationship between walking exercises, ER stress markers and insulin resistance in animals in literature. Therefore, the aim of this study is to examine the effects of 8-week walking programs of different intensities on ER stress and insulin resistance in pre-menopausal women.

**Methods:** Thirty-five healthy voluntary women meeting the inclusion criteria were divided into three groups as brisk walking group (BWG; n=12), moderate tempo walking group (MTWG; n=11), and control group (CG; n=12). Exercise groups walked for eight weeks, five days per week from 30 min per day steadily increasing up to 51 minutes. BWG and MTWG walked at ~70-75% heart rate reserve (HRR), and at ~50-55% HRR, respectively. Body composition, maximal oxygen consumption (VO2max), TNF- $\alpha$ , Fetuin-A, JNK-1, RBP-4, blood lipids, and insulin resistance levels were measured before and after the study. Body composition was measured using bio electrical impedance analyzer (Model TBF-300, Tanita Corp, Tokyo, Japan). Within group and inter-group differences were determined using non-parametric tests.

**Results:** VO2max increased in both exercise groups favoring BWG (BWG and MTWG: p<0.01and p<0.05, respectively); RBP-4 decreased in both exercise groups (p<0.01, p<0.05, respectively). Serum TNF-  $\alpha$ , TG, BMI, percent body fat, and insulin levels reduced significantly in BWG (p<0.05). The reductions observed in JNK-1 levels in BWG were clinically important.

**Conclusion**: We determined that walking with high tempo increased aerobic capacity more dominantly, and both type of walking programs resulted in similar positive effects on RBP-4. The reduction observed in TNF- $\alpha$ , RBP-4, JNK-1 levels in BWG shows the positive effects of exercise on ER stress. The reduction in insulin resistance in relation to the reductions in ER stress and apoptosis is of great importance to prevent metabolic diseases.

Keywords: Walking Exercises, Premenopausal Women, Estimated MaxVO2, Endoplasmic Reticulum Stress, Apoptosis, Obesity

<sup>&</sup>lt;sup>1</sup> Celal Bayar University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Dokuz Eylül University School of Sport Sciences and Technology

<sup>&</sup>lt;sup>3</sup> Celal Bayar University Medicine Faculty

# OP. 7 DO PROGRESSIVE RESISTANCE TRAINING PROGRAMS OF DIFFERENT INTENSITIES AFFECT THE LEVELS OF CARDIAC RISK MARKERS, YKL-40, MATRIX GLA PROTEIN, AND HSC-REACTIVE PROTEIN IN PREMENOPAUSAL WOMEN?

<u>Hasan Esen</u><sup>1</sup>, Gürbüz Büyükyazı <sup>2</sup>, Fatma Taneli Ulman <sup>3</sup>, Cevval Ulman <sup>3</sup>, Hakan Tıkız <sup>3</sup>, Mehmet Göral <sup>1</sup>, Sema Bilge <sup>3</sup>, Yeliz Doğru <sup>1</sup>

### **Abstract**

**Aim:** The aim of the present study is to investigate the effects of 8-week resistance programs of two different intensities on the levels of cardiac risk markers, YKL-40, matrix gla protein (MGP), and highly—sensitive C-reactive protein (hs-CRP) in premenopausal women.

Method: Thirty healthy premenopausal women (aged 35-45 years) participated in this study.

High intensity group (HIG; n:10) worked 3 days a week and performed two sets of 8-10 repetitions at ~70-75% of 1 repeat maximum (RM), whereas low intensity group (LIG; n:10) worked in the same duration and applied two sets of 13-17 repetitions at ~40-45% of 1 repeat maximum (RM). Control group (CG; n=10) did not perform any exercises. Body composition, 1RM value for 7 exercises (chest press, seated row, shoulder press, knee flexion, knee extension, biceps curl, triceps extension, abdominal crunch, hyper extension), maximum repetitions for sit-ups and hyper extension they could perform were assessed. Cardiac risk markers; matrix gla protein, YKL-40, and hs-CRP levels were analyzed in blood before and after exercise programs.

**Results:** Body weight, body fat percentage, and body mass index values decreased significantly (p< 0.05) in both exercise groups. Resistance exercises did not affect the levels of hs-CRP and YKL-40, but MGP levels decreased significantly in both exercise groups (p< 0.05). Strength measures increased in both exercise groups (p< 0.05), favoring the HIG.

**Conclusion:** Resistance exercise programs can be advised to premenopausal women to create protective effects for cardiac risk markers and vascular calcification in accordance with developments in body composition, maximum strength, and MGP.

Keywords: Resistance Exercise, Matrix Gla Protein, Ykl-40, and Hsc-Reactive Protein

#### OP. 8 THE EFFECTS OF DIFFERENT INTENSITY RESISTANCE EXERCISE PROGRAMS ON THE **LEVELS OF OXIDATIVE STRESS** MARKERS, **URIC** ACID, 8-**ISOPROSTAGLANDIN** 8-HYDROXY-2'-DEOKSIGUANOSINE F2A, AND PREMENOPAUSAL WOMEN

<u>Hasan Esen</u><sup>1</sup>, Gürbüz Büyükyazı <sup>2</sup>, Cevval Ulman <sup>3</sup>, Fatma Taneli <sup>3</sup>, Hakan Tıkız <sup>3</sup>, Mehmet Göral <sup>1</sup>, Sema Bilge <sup>3</sup>, Yeliz Doğru <sup>1</sup>

### Abstract

**Aim:** This study aims to investigate the effects of 8-week different intensity resistance programs on the levels of cardiac risk markers related with oxidative stress markers; uric acid (UA), 8-isoprostaglandin  $F_{2\alpha}$  (8-iso-PGF $_{2\alpha}$ ), and 8-hydroxy-2'-deoxyguanosine (8-OHdG) in premenopausal women.

Method: Thirty healthy pre-menopausal women (aged 35-45 years) participated in the two different

<sup>&</sup>lt;sup>1</sup> Celal Bayar University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Dokuz Eylül University School of Sports Sciences and Technology

<sup>&</sup>lt;sup>3</sup> Celal Bayar University Medicine Faculty

<sup>&</sup>lt;sup>1</sup> Celal Bayar University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Dokuz Eylül University School of Sport Sciences and Technology

<sup>&</sup>lt;sup>3</sup> Celal Bayar University Medicine Faculty

intensity resistance programs. High intensity group (HIG; n:10) worked 3 days a week and performed two sets of 8-10 repetitions at ~70-75% of 1 repeat maximum (RM) while low intensity group (LIG; n:10) worked in the same duration and applied two sets of 13-17 repetitions at ~40-45% of 1 RM. Control group (CG; n = 10) did not perform any exercises. Body composition, 1RM value for 7 exercises (chest press, seated row, shoulder press, knee flexion, knee extension, biceps curl, triceps extension, abdominal crunch, hyper extension), maximum repetitions for sit-ups and hyper extension they could perform were assessed. Uric acid, isoprostaglandin  $F_{2\alpha}$ , and 8-hydroxy-2'-deoksiguanosine levels were determined in biochemical analysis.

**Results:** Body weight, body fat percentage, and body mass index values decreased significantly (p<. 005) in exercise groups at the end of the  $8^{th}$  week. Resistance exercises did not affect the levels of UA and 8-OHdG; however 8-isoprostaglandin  $F_{2\alpha}$  levels decreased significantly in both exercise groups (p< 0.05). Similar reduction (p<0.05) was observed in the control group. Strength measures increased in both exercise groups (p< 0.05), favoring the HIG. As expected, no changes in the strength measures were observed in the control group.

**Conclusion:** Because of the positive changes observed in both exercise groups in body composition, maximal strength, and 8-iso-PGF2 $_{Q}$ , resistance training programs can be thought to be beneficial in preventing cardiovascular diseases by reducing oxidative stress and cardiac risk factors.

Keywords: Resistance Training, 8-İsoprostaglandin F2α, And 8-Hydroxy-2'-Deoxyguanosine, And Uric Acid

# OP. 10 A NEW MEASURING EFFICIENY FOR BASKETBALL USING FUZZY CLUSTERING ANALYSIS

Necati Alp Erilli<sup>1</sup>, Egemen Ermiş <sup>2</sup>

### Abstract

**Aim**:Sports fans frequently debate about which team is the best, usually by quoting won-lost records. Conversely, many coaches talk less about won-lost records and more about their teams 'playing up to their potential'. We can easily ask this question, 'How well do players in their leagues play up to their potential?' Estimating a stochastic production frontier model will provide the answers. Simply we answered these questions with the help of an efficiency scale. This scale is called MVP (most valuable player). This scale can be used in many kinds of sports like basketball, soccer, volleyball etc.

In basketball there are important leagues like NBA, Euroleague etc. Last year, NBA income was over than 4 billion dollar. This value summaries potential and interest of basketball.

**Method**:Clustering is the assignment of a set of observations into subsets (called *clusters*) so that observations in the same cluster are similar in some sense. In fuzzy clustering, fuzzy techniques are used to cluster the data and with these techniques an object can be classified in more than one cluster. This approach comes into the picture as an appropriate method when the clusters cannot be separated from each other distinctly or when some units are uncertain about membership. Fuzzy clusters are functions modifying each unit between 0 and 1 which is defined as the membership of the unit in the cluster. The units which are very similar to each other hold their places in the same cluster according to their membership degree.

This study introduces a new MVP determination method for basketball. Unlike other methods, this method includes both the players' individual percentages and also percentages within the team. MVP determination methods used in important leagues such as NBA and Euroleague take into consideration only the points, assists or rebounds of the players and these statistics ignore the percentages or rates of the team in general. Even though it is enough for a player to be MVP for that game by scoring 50 points with 15/50, the 35 shoots he misses are not considered in the statistics. This study assesses the

<sup>&</sup>lt;sup>1</sup> Cumhuriyet University Faculty of Economics and Administrative Sciences Department of Econometrics

<sup>&</sup>lt;sup>2</sup> 19 Mayıs University Yaşar Doğu Faculty of Sport Sciences

shoots which are missed as well as the ones which are scored by using fuzzy clustering method.

**Result**:The results were compared with MVP results taken from games in important leagues such as NBA and Euroleague. In the game between Phoenix Suns and Utah Jazz, Phoenix guard Goran Dragic scored 5 pts. with the shooting percentage of 2/11. His ranking scale was only 3. But his field goal percentage 0,18 is the lowest percentage in the team and this wasn't estimated in efficiency ranking. Proposed efficiency ranking can be estimate both with the help of fuzzy clustering analysis and player and team percentages for all categories. Thus, Gragic new efficiency number is 1,2. This number is less than first one and included his low shooting percentages.

**Indication**: Does this analysis answer all the questions one might have regarding a player's production? Although this analysis does offer a fair evaluation of *how* productive a player is, it does not tell us *why* a player achieves such productivity. The answer to this question likely begins with the player's innate ability, but also includes such factors as experience, coaching, and team chemistry. Certainly the answer to the question of why each player achieves his respective productivity begins with the question of how productive the player has been. This alternative method can be helpful for calculating MVP parameters.

Keywords: MVP, Basketball, Fuzzy Clustering, NBA

### OP. 39 THE RELATIVE AGE EFFECT IN TURKISH SOCCER

Olcay Mülazımoğlu<sup>1</sup>, Mehmet Bayansalduz <sup>1</sup>, Kerimhan Kaynak <sup>2</sup>, Hacer Dilek Mülazımoğlu <sup>3</sup>

- <sup>1</sup> Muğla Sıtkı Koçman University School of School of Physical Education and Sports
- <sup>2</sup> Kayseri Erciyes University School of School of Physical Education and Sports
- <sup>3</sup> Ministry of National Education Yatağan Anadolu Health Professions High School

#### **Abstract**

**Purpose:** Relative Age Effect (RAE) refers to the difference between the individuals who were born earliest and latest in the same year. RAE has recently become a matter at hand in the formation of age categories in sports and education. Among the children and young people who are at the same age group, the development of some physical, biological and mental features of the ones who were born in the first months are ahead of the ones who were born in the last months of the same year. In sports, this advantage affects a very important issue; which is to be selected to or preferred by a team. In accordance with this information, the purpose of the present research is examining the existence and extensity of RAE in the competition categories of Turkish football.

**Method:** The data set of the present research is formed by 530 professional and 2544 young; a total of 3074 male football players. The certified players participated actively in the 2013-2014 football season competitions within the body of 19 professional and 133 junior teams of Turkish First Football League (TFFL) which is the second top level league in Turkish football. Birth-date data of the football players were obtained from the Turkish Football Federation (TFF) web site. Foreign players were excluded from the evaluation. While examining the RAE in football players, evaluations were conducted on 8 age categories (U-13, U14, U-15, U-16, U-17, U-19, A2, A teams) in accordance with the TFF. According to the category system, beginning of the birth-year was taken as "1 January" and the end of birth-year was taken as "31 December"; quarters years were assessed in 4 quarters of 3 months-period (e.g. January-February-March). The significance of the differences between groups and; birth-month distributions and quarter-year distributions of football players were analyzed with chi-square test.

**Findings**: According to Kolmogorov-Smirnov test outputs, players' birth-month distribution didn't present "Normal Distribution" (p<0.01). In all categories, it was observed that there is an excessive accumulation in the players' first month (January=22.10%) and first quarter (January-February-March=44.44%) birth rates. In all categories, players' birth-month distributions were found significantly high in the first month and first quarter of the year (p<0.01). In terms of categories, it was found that especially the first quarter months distributions were at very high rates (U-13=50.0%; U-14=48.22%; U-15=%-46.24%; U-16=45.29%; U-17=46.68%; U-19=41.81%; A2=41.02%; A=40.0%), and there is a significant difference between quarter-year distributions (p<0.01).

**Conclusion:** It is observed that, 1<sup>st</sup> League Clubs that form an important part of Turkish football and their football players in the male football teams are affected by the RAE phenomenon. Consequently, the present research revealed the existence and extensity of RAE on the workgroup. Therefore, it can be claimed that early development is an advantage for players to be selected to teams. The individuals who were born later in the same year have a disadvantage in terms of physical structure and maturation; which creates a situation against them in being selected to teams or rosters. Because of this situation, many talented but late-developed individuals may drop-out without finding a chance. In player selection processes, trainers should be very careful in order to eliminate this unfair competition.

Keywords: Relative Age Effect, Rae, Birth-Month, Youth, Professional, Soccer Players

# OP. 49 THE PHYSIOLOGICAL PROFILE AND PERFORMANCE RESPONSES OF ELITE MALE TENNIS PLAYERS DURING TENNIS MATCH

Bülent Kilit<sup>1</sup>, Ömer Şenel<sup>2</sup>, Erşan Arslan<sup>3</sup>, Sema Can<sup>1</sup>, Mustafa Balaban<sup>4</sup>

- <sup>1</sup> Hitit University School of Physical Education and Sports
- <sup>2</sup> Gazi University School of Physical Education and Sports
- <sup>3</sup> Siirt University School of Physical Education and Sports

### **Abstract**

**Objective:** The purpose of this study was to investigate the physiological profiles and performance responses of elite male tennis players during tennis match.

**Methods:** In this study, 10 elite male tennis players (mean age 22.2 $\pm$ 2.8; mean height 180.7  $\pm$  4.4 cm; mean weight 75.9  $\pm$  8.9 kg) who have taken place in the ranking of 1-20 according to Turkey Tennis Federation standings participated in the study voluntarily. All players were notified of the research procedures, requirements, benefits, and risks before giving informed consent. Written informed consent was obtained from all the subjects. This study was approved by the Research Ethics Committee of Gazi University, and was conducted in a manner consistent with the institutional ethical requirements for human experimentation in accordance with the Declaration of Helsinki. The subjects were informed about tests which consist of 3 experimental sessions an International Tennis Number Test (ITN) on-court assessment, laboratory tests, 60 minutes of tennis match which was played using portable gas analyzer (K4b<sup>2</sup>Cosmed). The study was conducted over 2 week period. On the first week, subjects were underwent anthropometric, body composition, strength, sprint, flexibility, aerobic and anaerobic measurements followed by the International Tennis Number test (ITN) assessed variety technique (forehand, backhand, serve and volley). After ITN measurements, during 60 minutes of tennis matches, oxygen consumption (Vo<sub>2</sub>) and Heart Rate (HR) responses were measured by

K4b<sup>2</sup>Cosmed portable gas analyzer system. In addition, rally duration, rest time between rallies, work-to-rest ratio, effective playing time, strokes per rally and strokes frequency were measured during all matches. Statistical analyses were done by using descriptive statistics (frequency, percentage, mean and standard deviation) and the relationship between variables describing the characteristics of the match and the physiological responses obtained at the end of games examined and was determined using Pearson product moment correlation analysis in SPSS 16.0 package program..

**Results:** As results of this study; the mean values for the physiological variables were identified as follows: body mass index  $23.2\pm2.3$  kg.cm<sup>-2</sup>; basal metabolic rate  $1984\pm174$  Kcal; body fat  $10.9\pm4.1$  %;  $Vo_{2max}$   $49.8\pm1.2$  ml.kg<sup>-1</sup>.dk<sup>-1</sup>; sit and reach test  $18.9\pm4.6$  cm; paw strength: dominant hand  $154.9\pm3.5$  kg; nondominant hand  $47.8\pm4.4$  kg; back strength  $150.2\pm12.1$  kg; leg strength  $202\pm12.5$  kg; sprint tests (respectively 5-10-20 m)  $1.08\pm0.04$  s,  $1.85\pm0.04$  s,  $3.13\pm0.05$  s; light reaction time: dominant hand  $0.198\pm0.01$  ms, nondominant hand  $0.202\pm0.02$  ms; sound reaction time:

<sup>&</sup>lt;sup>4</sup> Ankara University Tennis Club Coach

dominant hand 0.161±0.01 ms, nondominant hand 0.169±0.02 ms; wingate (WaNT) peak power 11.3±1.5 watt.kg<sup>-1</sup>; WaNT mean power 8.2±0.7 watt.kg<sup>-1</sup>; WaNT minimum power 3.1±1.8 watt.kg<sup>-1</sup>; fatique index 70.7±16.9 %; international tennis number test 369.3±24.7 score. The mean match characteristics were identified as follows: rally duration 6.7±4.7 s; rest time between rallies 25.9±17.7 s; percentage of effective playing time, 26.3±3.2 %; work-to-rest ratio 1:3.83; number of shots per rally 3.9±2.9; frequency of shots 43.3±3.4 strokes.min<sup>-1</sup>; oxygen consumption (Vo2), 26.6±2.7 ml.kg<sup>-1</sup>min<sup>-1</sup>; mean heart rate (HR) 142.7±9.5 beats.min<sup>-1</sup>; frequency of respiratory 39.8±9.9 b.min<sup>-1</sup> and energy expenditure, 568±58.8 Kcal.

Conclusion: In conclusion, there were found similar results on some parameters according to previous literature results. In addition, strength (back and legs) and aerobic power responses are observed decrease while fatigue index responses are higher than the studies in literature. Decreasing aerobic power and increasing fatigue index responses causes early fatigue and late recovery in long-term competitions for athletes. Furthermore, if strength responses are not enough, it effects negatively match and training performance as well. Because of the fact that we thought that strength and endurance training should be tennis-specific. For the development of strength and endurance, contents of training must be sport-specific and for faster recovery should be provided by different ways of load and rest intervals.

Keywords: Physiological Profile, Match, Performance Response, Tennis

# OP. 59 ACUTE RESIDUAL EFFECTS OF SHORT AND LONG DURATION STATIC STRETCHING ON COUNTER MOVEMENT JUMP PERFORMANCES IN WELL-TRAINED COMBAT ATHLETES

 $\underline{\mathsf{Isa}}\; \underline{\mathsf{Sa}\underline{\mathsf{giro}\underline{\mathsf{glu}}}}^1,$ Ekim Pekünlü $^2,$  Cem Kurt $^1,$ İlbilge Özsu $^3$ 

#### **Abstract**

**PURPOSE**: The primary purpose of the current study is to investigate the acute residual effects of short and long duration lower body static stretching protocols on counter movement jump performance in well-trained combat athletes. Secondary purpose is to assess the minimum detectable change scores with 90% confidence (MDC $_{90}$ ) for counter movement jump with arm swing (CMJ $_{AS}$ ) and with hands on hips (CMJ $_{HH}$ ).

**METHOD**:Twelve well-trained female combat athletes (age:  $21.2 \pm 2.5$  years, height:  $1.60 \pm 0.06$  m, mass:  $57.5 \pm 9.8$  kg, training experience:  $11.5 \pm 3.6$  years, training volume:  $8.79 \pm 3.32$  hours/week) performed short duration static stretching protocol (S-SS) and long duration static stretching protocol (L-SS) separated by 48 hours in a randomized, balanced order. Stretching protocols included 3 sets of seated bilateral hamstring stretch, standing unilateral calf stretch (leg straight), standing unilateral calf stretch (bent knee), and standing unilateral quadriceps stretch. Duration of each stretching exercise in the S-SS and L-SS were 15 seconds and 30 seconds, respectively. After each protocol participants performed, respectively, CMJ<sub>AS</sub> and CMJ<sub>HH</sub> separated by 30-second rest interval at the start (0

minute), 1<sup>st</sup>, 5<sup>th</sup>, 10<sup>th</sup>, 15<sup>th</sup> and 20<sup>th</sup> minute of the 20-minute recovery period. CMJ heights obtained in the recovery period were compared with pre-test CMJ heights obtained before the conduction of the stretching protocols. A familiarization session for different types of CMJs was conducted 48 hours prior to the start of the study.

**RESULTS**:Mean baseline CMJ<sub>AS</sub> and CMJ<sub>HH</sub> of the study sample were  $35.4 \pm 4.0$  cm, and  $31.2 \pm 3.2$  cm, respectively. A 2 x 2 x 7 (Jump Type x Protocol x Time) three-factor repeated measures analysis of variance (ANOVA) results revealed a significant main effect for Jump Type indicating that

<sup>1</sup> Trakya University Kırkpınar School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Ege University School of Physical Education and Sports

<sup>&</sup>lt;sup>3</sup> Ege University Institute of Health Sciences

participants obtained greater jump heights in CMJ<sub>AS</sub> when compared with CMJ<sub>HH</sub> (p < 0.001,  $\eta_p^2$  = 0.947, power = 1.00). A significant main effect for Time (p < 0.001,  $\eta_p^2$  = 0.683, power = 1.00) indicated that participants obtained different CMJ heights when baseline and post-protocol CMJ data were evaluated together. There was a similar change pattern (an insignificant interaction effect for Protocol x Time) in CMJ heights throughout the 20-minute recovery period after each stretching protocol (p = 0.722,  $\eta_p^2$  = 0.377, power = 0.127). CMJ heights remained significantly diminished throughout the recovery period.

According to one-factor within-subject ANOVAs with post-hoc Fisher's LSD test (no confidence interval adjustment was performed for post-hoc analysis to avoid loss of statistical power), S-SS led to a mean  $\mathrm{CMJ}_{AS}$  and  $\mathrm{CMJ}_{HH}$  height reductions of 1.96 cm and 2.25 cm with mean effect sizes of 0.509 and 0.697, respectively, throughout the 20-minute recovery period. These reductions were 2.31 cm and 2.21 cm with mean effect sizes of 0.584 and 0.635 after L-SS.

 $MDC_{90}$  for  $CMJ_{AS}$  and  $CMJ_{HH}$  were 2.36 cm and 1.54 cm, respectively. At the least 25% and at the most ~67% of participants experienced a  $CMJ_{AS}$  height reduction greater than  $MDC_{90}$  after each stretching protocol at each testing time points during the recovery period. According to  $CMJ_{HH}$  data, at the least 50% of the participants experienced a jump height reduction greater than  $MDC_{90}$  immediately and 1 minute after each stretching protocol. At the 5<sup>th</sup>,  $10^{th}$ ,  $15^{th}$  and  $20^{th}$  minute of the recovery, this percentage score exceeded 75%.

**CONCLUSION**: Short and long duration static stretching protocols including at the total of 3 minutes and 6 minutes of lower body stretches, respectively, led to a significant reduction in CMJ performances in well-trained combat athletes. CMJ performances remained significantly diminished throughout the 20-minute recovery period. Accordingly, combat athletes should abstain from static stretches prior to competitions and/or training sessions to prevent possible reductions in muscular performances including stretch-shortening type movements, which are commonly used in combat sports.

Training modalities that would lead to an individual performance enhancement of approximate 2.4 cm and 1.5 cm in CMJ<sub>AS</sub> and CMJ<sub>HH</sub>, respectively, may be considered as effective training modalities for well-trained combat athletes participated in the current study.

Keywords: Static Stretching, Combat Athletes, Residual Effects, Counter Movement Jump

# OP. 68 EFFECTS OF VIBRATION ON MULTI-MUSCLE SYNERGIES DURING VOLUNTARY BODY SWAY

Pınar Arpınar Avşar<sup>1</sup>, Stanislaw Solnik <sup>2</sup>, Yen-Hsun Wu <sup>2</sup>, Mark Latash <sup>2</sup>

### **Abstract**

It has long been hypothesized that the central nervous system generates relatively small amount of stereotyped muscle activations to control large muscle groups instead of sending independent signals to each muscle. It is often referred to as the notion of "muscle synergies" that introduces muscle groups (muscle modes) as elemental variables manipulated by the controller. Thus, a change in magnitude of each mode is likely to produce parallel modulations in activity levels of many muscles. Since muscle vibration produces a very high level of activity in the primary endings of muscle spindles, it leads to increased presynaptic inhibition of primary afferent projections on alphamotoneurons that results in sensorimotor events such as reflex contraction of muscles and kinesthetic illusions. The main purpose of the current study, therefore, has been to examine the possible changes of multi-M-mode synergies during voluntary body sway in response to vibration of ankle flexor and/or

<sup>&</sup>lt;sup>1</sup> Hacettepe University Faculty of Sport Sciences

<sup>&</sup>lt;sup>2</sup> Pennsylvania State University Department of Kinesiology

extensor muscles. Ten healthy subjects participated in the experiment. Subjects were asked to perform voluntary body sways between most comfortable anterior and posterior position of center of pressure on a 6-dof force platform. The moment of force around the x-axis (M<sub>Y</sub>), the shear force along the xaxis (F<sub>X</sub>) were selected as performance parameters and muscle (M-mode) synergies stabilizing each of the two performance variables were analyzed under the framework of the uncontrolled manifold hypothesis. Two components of variance (V<sub>IICM</sub> and V<sub>ORT</sub>) in the M-mode space were computed across sway cycles. Surface muscle activity (EMG) was recorded from eleven muscles dorsal and ventral muscles. Principal component analysis (PCA) was performed on data over the whole cycle in order to identify groups of muscles (muscle modes). Analysis of variance of muscle modes has revealed relatively low level of multi-muscle-mode synergies stabilizing shifts of the center of pressure under vibration conditions. Effects of the phase dependent changes in each variance indices across four experimental conditions were tested with three-way repeated measures ANOVA with the factors Variance, Phase and Condition. Whereas there is a significant main effect of Variance on none of the performance parameter, ANOVA confirmed significant effect of Condition and Phase on My and on Fx. The study confirms the destabilizing effects of vibration on voluntary body sway which might be a consequence of lower multi-muscle synergies during vibration conditions.

Keywords: Synergy, Sway, Vibration, PCA

# OP. 76 EXAMINATION OF THE EFFECT OF FATIGUE ON YOUNG BASKETBALL PLAYERS

Olcay Mülazımoğlu<sup>1</sup>, Şenol Yanar <sup>1</sup>, Ahmet Tunca Evcil <sup>1</sup>, Ahmet Duvan <sup>2</sup>

<sup>1</sup> Muğla Sıtkı Koçman University School of Physical Education and Sports

#### Abstract

Fatigue refers to decrease in maximal strength and maximal power and ever falling down performance as a result of intense exercise. The purpose of the present research is, examining the effect of fatigue that occurs as a result of intense exercise on shot accuracy of young basketball players.

13 male basketball players in stars category (age=15.08±0.64 years, height=175.38±8.55 cm., weight=70.54±16.10 kg) participated in the research. AAHPERD Basketball Skills Test Speed Shot Shooting test was used to measure the shot accuracy skills of basketball players. AAHPERD Basketball Skills Test consists of basketball-specific technical tests such as dribbling, passing, speed shot or defensive movements. Reliability coefficient of the all sections of the test was declared as 0.65-0.95. Test-retest reliability study presented that reliability coefficient of the test is 0.84-0.97 (Strand & Wilson, 1993). In the present research, Speed Shot section of the test was found to be appropriate in order to measure the shooting skills of young basketball players.

In order to create fatigue in basketball players, Yo-Yo Intermittent Recovery, Level 1 Test that consists of runs performed at increasing velocity (Yo-Yo IR1 test) was used. Yo-Yo IR1 is a test that consists of runs performed at increasing velocities and 10-second recovery intervals and implemented in a 2\*20 meter field (Krustrup, et al., 2003). Heart beat rates (HR) of the players were recorded with heart beat monitor (Polar RS800CX monitor, Polar Electro OY, Kempele, Finland).

In accordance with the experimental design implemented in the present research, basketball speed shot test was applied on players after 10-15 minute warm-up activities without any physical stress. Heart beat rates (HR<sub>pre-test</sub>) and shot test scores (STS<sub>pre-test</sub>) were recorded. Later, players who were exposed to physical stress with Yo-Yo IR1 run test and they ran until they reach at fatigue level. At exhaustion point, Yo-Yo IR1 levels, and heart beat rates (HR<sub>post-test</sub>) were recorded and speed shot test was implemented immediately. The players whose shot test scores (ST<sub>post-test</sub>) were recorded, ended the workout.

Pre-test and post-test heart beat rates and shot test scores of the players were compared statistically

<sup>&</sup>lt;sup>2</sup> Kastamonu University School of Physical Education and Sports

with paired sample t-test. In order to provide clarity of the data, they were presented in tables and graphs. Significance levels were taken as 0.01 and 0.05 in the analysis of the data obtained from the statistical packaged software.

According to the findings obtained from the present research, there is a significant difference between pre-test and post-test averages of heart beat rates ( $t_{(12)}$ =-12.41; p<0.01). There is significant difference between pre-test and post-test averages of shot test scores ( $t_{(12)}$ =5.20; p<0.01). It was observed that average maximal heart beat rate values ( $X_{KAmax}$ =198.54±7.92 beat/min) of the players before shot test post-test reached at 75%-95% level. This indicates that, shooting skills of the players were measured at sub-maximal values of fatigue levels.

Consequently, it was an expected outcome that, heart beat rates of the players who were exposed to physical stress increased toward maximal values. On the other hand, when players are exposed to fatigue until exhaustion level, their shooting accuracy skills are marred. Therefore, it is important for trainers to know at what level the basketball-specific skills of players are affected when they are exhausted and at what extent this affects their performance. Training branch-specific energy metabolism of the players in order to provide that technical skills of players are less affected by fatigue will increase game efficacy. Trainers' knowing the players' level of being affected by fatigue individually, will contribute to forming the match strategy.

Keywords: Basketball, Fatigue, Shot Accuracy Test, Yo-Yo IR1 Test

# OP. 79 ANALYSIS OF THE INFLUENCE REGIONAL (CORE) TRAINING OVER SOME MOTOR SKILLS OF 18- YEAR-OLD SOCCER(FOOTBALL) PLAYERS

Yakup Akif Afyon <sup>1</sup>, <u>Abdurrahman Boyacı</u> <sup>1</sup>

### **Abstract**

**Purpose**: The aim of this study is to analyze the effects of 8-week core training on the some motor features on 18-year old football players and to identify whether football coaches can apply the core training that is used for power training method.

**Method**: In the study, pre-test and post-test patterned experimental method with control group was used. 40 licensed football players attended the study, one control and one experiment group. The control group(n=20, body weight X=70,66±5,74kg, height X=171,75±2,99cm) and experiment group(n=20, body weight X=71,66±6,61kg, height, X=172,24±5,86 cm) were composed of 18-year-old football players in B.B Bodrumspor in Bodrum/Muğla in Turkey.

The necessary permissions were taken from their parents and corresponding institutions. While aerobic and anaerobic studies that were revised according to their yearly training program were applied to the control group, experiment group performed this program for 8 weeks two days a week for 30-35 minutes apart from their regular football training and full attendance was sustained.

**Training Program:** In the program, 10 moves define the core area (*Side Bend, Power Shiver, Alternate Legs Jump, Squat, Chunch, Lying Twist trunk, Twist With Medicine Ball, Side Bridge, Alternate plank, Alternate Superman*). The core training program was organized and applied by trainers who are doing their Master's Degree at Muğla Sıtkı Koçman University School of Physical Education and Sports s Graduate School and have training licenses. Before the training, general and local warm-ups corresponding with the moves for 15 to 20 minutes were completed. The moves were applied by time and repetition method and the rest-times were given accordingly. This program was performed by the sportsmen in the experiment group for 8 weeks twice a week for 30-35 second at the same hour of the day on the artificial grass field of Bodrumspor apart from the regular training days. On the other hand the control group followed their yearly training program and had no additional training.

**Findings**: According to the pre and post test data of 8 week core training, the values of footballer's vertical jump, 30 m speed, medicine ball throwing, push-up sit-up and plank are demonstrated as

<sup>&</sup>lt;sup>1</sup> Muğla Sıtkı Koçman University School of Physical Education and Sports

tables below.

The demographic value, experiment group average, standard deviation and p value of the study groups are as following: n=20, age X=18 year, body weight X=71,66±6,61 kg, height X=172,24±5,86 cm, and control group, n=20, age X=18 year, body weight X=70,66±5,74 kg, height X=171,75±2,99 cm.

According to paired T test results, when average, standard deviations and P values of the experiment group (VJ =45,87  $\pm$ 6,26, 30m=6,10  $\pm$ 0,30, MBT =7,72 $\pm$ 4,36, Pushup=32,28 $\pm$ 3,68, Situp=43,18  $\pm$ 3,59, Plank=83,17  $\pm$ 18,23) and average, standard deviations and P values of the control group (VJ =44,22  $\pm$ 3,16, 30m=6,11  $\pm$ 0,12, MBT =7,11 $\pm$ 1,34, Pushup =33,21 $\pm$ 3,12, Situp=42,25  $\pm$ 3,23, Plank=85,13  $\pm$ 14,24) pre tests were compared before 8 week core training, no meaningful differences were found. (VJ=Vertical Jump, MBT= Medicine Ball throwing)

According to Paired T test, when the pre and post test avarages, standard deviations and p values were compared after the core training program meaningful difference (p<0.05) was found. (Pretest / Posttest / p, VJ=  $45.87 \pm 6.26 / 54.50 \pm 2.56 / .000*, 30m=6.10 \pm 0.30 / 5.58 \pm 0.07 / .000*, MBT = 7.72\pm4.36 / 11.01\pm1.34 / .000*, Pushup= <math>32.28\pm3.68 / 43.14\pm5.35 / .000*, Sit-up= 43.18 \pm3.59 / 51.60 \pm4.18 / .000*, Plank= <math>83.17 \pm18.23 / 116.32 \pm23.21 / .000*$ ).

**Discussion and Conclusion**: After the 8 week core training, statistically meaningful differences were observed in motor features of 18 year old sportsmen (p<0.05). When the related literature was studied; Many researchers stated that the core training applied on sportsmen has effects on motor features and contributes to sports (Afyon and Boyaci 2013, Saeterbakken, H.A., et all, 2011, Jim et all., 2013, Casey et all., 2012, Thomas et all, 2009, Basset ve Leach, 2011, Fredericson and Moore, 2005, Willardson, 2007, Michelle and Jonathan, 2013). Our study and the findings of the writes show parallelism.

Consequently in addition to yearly football training, 8 week core training has positive contribution to motor features of 18-year-old footballers and it can be advised that core training can be used in addition to regular training.

Keywords: Football, Core, Strength, Central Region, Motoric

# OP. 108 THE EFFECTS OF STATIC STRETCHING EXERCISES ON ANAEROBIC PERFORMANCE IN MALE ATHLETES WITH DIFFERENT FLEXIBILITY LEVELS

Merve Koca<sup>1</sup>, Atalay Arkan<sup>2</sup>, Sercin Kosova<sup>3</sup>

### Abstract

**Aim:** The objective of this study is to measure and evaluate the effects of static stretching exercises in male athletes with different flexibility levels on anaerobic performance.

**Method:** The sample of the search comprised of male athletes (between 18-29 years old) who perform exercises at least three days in a week regularly. Participants (n:30) visited the laboratory three times. Measurements were completed with four or five people, at the same time of the day (3pm-6pm) by having two or four days off between the two measurements and each time when they arrived, they were asked to ride on bicycle ergometer against a resistant of 50 Watt to warm-up. On the first day hamstring muscles flexibility was measured with sit and reach flexibility testing platform and quadriceps muscles flexibility was measured with goniometer. Vertical jump measurement was completed in two minutes. In the next two minutes, the participants were conducted Wingate Test (WT). On the second and third day of the study, stretching protocol was performed to participants. Then, vertical jump measurement and WT were repeated at intervals of two minutes. Stretching protocols included waiting 15 and 60 seconds in their maximum level which measured in the first day for each participant. Randomly selected half of the participants applied 15 seconds stretching protocol in the second measurement and 60 seconds stretching protocol in the third measurement. The other half of them applied the opposite of this application. Participants were divided into two groups

<sup>&</sup>lt;sup>1</sup> Dokuz Eylül University School of Sport Sciences and Technology

<sup>&</sup>lt;sup>2</sup> Dokuz Eylül University Faculty of Medicine

<sup>&</sup>lt;sup>3</sup> Ege University Institute of Health Sciences

according to their hamstring muscles level of flexibility by the median split method. Anaerobic power responses that given to different static stretching times were evaluated in both whole group and divided groups by repeated one way varriance analyses. The comparison of results between stretching groups were evaluated by independent samples t test.

**Result:** In the results of both vertical jumping test and WT, performed after different static stretching protocols, there was no statistically significant difference in whole group, in group with lower flexibility level and in group with higher flexibility level. In the results of compared two groups, there was no statistically significant difference.

**Conclusion:** The performance has not been affected by not applying stretching before anaerobic power performance, or completing short term static stretching or long term static stretching in male athletes (aged between 18-29).

Keywords: Static Stretching, Anaerobic Performance, Flexibility

# OP. 110 THE EFFECTS OF ACUTE VIBRATION APPLICATION ON VISUAL REACTION TIME FOR FENCERS

 $\underline{\mathsf{Sercin}\,\mathsf{Kosova}}^1$ , Mehmet İsmet Tok $^2$ , Hikmet Gümüş $^2$ , Merve Koca $^2$ 

#### Abstract

**AIM:** Reaction time (RT) is an important skill for gaining points in fencing. RT is the duration which passes till the start of the answer given to the stimulus. Though the speed of the movement is important, determining the alerts from the rival and choosing the best time for answer are more important for the fencer in competition. That is why, RT decrease is important for performance. The main purpose is to find out the effects of acute vibration exercise on reaction time to the fencers upper extremity.

**METHOD:** 51 volunteer male fencers between 15 and 25 ages  $(17.78 \pm 2.70)$  participated to the study. The fencers were divided randomly into two groups. RT measurements acquired by a fencing specific device which developed in Dokuz Eylül University Sports Physiology laboratuary. The RT measurements of the first group were measured, and then the vibration was given to the fencers. After that, the RT measurements were recorded again. The second group however, was first given the vibration and then the RT measured. After 30 minutes, RT were recorded again.

After warming-up, the fencers were tested by 5 times repetitive reaction test. The fencers started the reaction test with standard guard position. According to 5 signals coming within 2 - 5 seconds intervals from the target monitor, the fencers made touché to the monitor by bending (attacking). Vibration was applied for 30 seconds in 27 Hz, 2 mm amplitude. The best RT values recorded without vibration and post vibration were compared to each other. SPSS 20 software was used for the analysis of all data. Skewness and kurtosis values of the data were evaluated. Although volunteers in the groups are under 30, results show that data has a normal distribution. This is the reason why, paired samples t-test was applied in order to determine the differences of measurements in the same group.

**RESULT:** There was a statistically significant difference (p<0.001) when visual RT periods measured without vibration were compared to visual RT periods of post vibration.

**CONCLUSION:** Consequently, it was seen that acute vibration exercise shortened the visual RT period of fencers (p<0.001). The positive effects of vibration on RT can also affect the competition performance of the fencers. For this reason, the fencers and the coaches can use the vibration training to support the traditional training method. Besides, they can also use vibration exercise in some point of the warm-up period before competition or training.

Keywords: Vibration, Visual Reaction Time, Fencing

<sup>&</sup>lt;sup>1</sup> Ege University Institute of Health Sciences

<sup>&</sup>lt;sup>2</sup> Dokuz Eylül University School of Sport Sciences and Technology

# OP. 123 COMPARING THE EFFECT OF AEROBIC AND WEIGHT TRAINING EXERCISES ON MENTAL

 $\underline{\text{Vahid Moghaddam}}^1$ , Amir Moghaddam  $^2$ , Amin Azimkhani  $^3$ 

#### Abstract

**Objectives:** Many researchers have shown that physical activity not only is a valuable mean for physical health but it is also a leading contributor to mental health. Despite the fact that physical activity is beneficial to health but there are deferent opinion on the type of exercise and rate of its effectiveness. Therefore the purpose of this study is to compare the effect of two different type of exercise on mental health and its dimensions.

**Methods:** This research is semi-experimental with two group of experimental and group of control with a pre-test and post-test research design. Statistical sample included 60 men with the age range of 20-40 who were randomly divided into 3 groups of 20 subjects each: aerobics, weight training and control group. Participants took part in an 8 week weight training and aerobic exercise protocol/ with 3 sessions of 60 minutes in each week. For collecting the data the Goldberg's general health questionnaire was used. ANOVAs test used to analyze the data.

**Results**: The results of the study revealed that 8 weeks of aerobics exercise in comparison to weight training had a significant impact on mental health and its dimensions (somatic symptoms, anxiety and insomnia, social dysfunction and severe depression).

**Conclusions**: Aerobics exercise by increasing neurotransmitters and stimulating endocrine and cardiovascular systems for proper reactions and due to pneumatic nature could stimulate the endorphins discharge in a fashion that impact personas temperament in a positive way.

Keywords: Physical Activities, Aerobic Exercise, Weight Training, Mental Health

# OP. 127 COMPARISON OF CHANGE OF DIRECTION REPEATED SPRINT PERFORMANCE BETWEEN PROFESSIONAL AND AMATEUR YOUNG SOCCER PLAYERS AMONG 14-17 YEARS OLD

Mehmet Gören Köse<sup>1</sup>, Emin Ergen <sup>1</sup>, Atakan Yılmaz <sup>1</sup>

### Abstract

The aim of this study to compare change of direction repeated sprint performance between professional and amateur young soccer player amoung 14-17 years old. This study contains 133 volunteer soccer players which 69 professional young soccer players in Ptt 1.league ve Spor Toto 2.league, 64 amateur young soccer players in Regional Amatör League ve Amateur Süper League. The change of direction sprint performance was determined by 6x20 meter test. The fastest time, the average time, the total time and the percentage decreament were determined the end of the tests. The average heart rate was calculated during the test and the recovery heart rate was recorded 1 and 3 minutes after the test. The test was performed in synthetic pitch after the match at least 48 hours at spesific days which is not unsuitable weather conditions. Difference of 14 aged professinal young soccer players and 14 aged amateur young soccer players' fastest sprint time (F=0,000; p<0,05), average sprint time (F=0,001; p<0,05), total sprint time (F=0,001; p<0,05), percentage decreament (F=0,019; p<0,05) and average heart rate (F=0,009; p<0,05) is significiant statistically. Difference of 15 aged professinal young soccer players and 15 aged amateur young soccer players' fastest sprint

 $<sup>^{1}</sup>$  Qazvin Branch, Islamic Azad University Department of School of Physical Education and Sports Sciences

<sup>&</sup>lt;sup>2</sup> Mashhad Branch, Islamic Azad University Department of School of Physical Education and Sports Sciences

<sup>&</sup>lt;sup>3</sup> Imam Reza International University of Mashhad School of Physical Education and Sports Sciences

<sup>&</sup>lt;sup>1</sup> Başkent University Department of Sport Sciences

time (F=0,001; p<0,05), average sprint time (F=0,000; p<0,05) and total sprint time (F=0,000; p<0,05) is significiant statistically. Difference of 16 aged professinal young soccer players and 16 aged amateur young soccer players' fastest sprint time (F=0,000; p<0,05), average sprint time (F=0,000; p<0,05) and total sprint time (F=0,000; p<0,05), is significiant statistically. Difference of 17 aged professinal young soccer players and 17 aged amateur young soccer players' fastest sprint time (F=0,000; p<0,05), average sprint time (F=0,000; p<0,05) and total sprint time (F=0,000; p<0,05), is significiant statistically. As a conclusion, the difference of professional and amateur young soccer players' height, weight and fat percentage is not significant statistically. The fastest sprint time, average sprint time and total sprint time in professional group have been determined to be better compared to amateur group. The difference of percentage decreament and average heart rate have been found only in 14 aged group. There have been no difference in recovery heart rate between any group.

Keywords: Change of Direction Repeated Sprint, Amateur, Professional, Young Soccer Player OP. 130 COMPARISON OF BIOMETRIC MEASUREMENT VALUES OF OSSA ANTEBRACHII IN WEIGHTLIFTERS AND SEDENTARY INDIVIDUALS

Mehmet Emin Yıldız<sup>1</sup>, Kamil Beşoluk <sup>2</sup>

#### Abstract

Purpose: This study aims to investigate the biometric effects of weightlifting on antebrachium.

Material and Method: Study group was composed of 9 adult male weightlifters and 9 sedentary adult individuals between the ages of 20-25. Body weight and height of participants were obtained. Left arm radius distal terminus bone mineral density (BMD) was measured via dual-energy x-ray absorptiometry (DEXA) method and recorded as gr/cm<sup>2</sup>. Two dimensional (2D) images of right and left antebrachium bones were obtained through multi detector computed tomography (MDCT). 2D images were converted to 3D images with the help of Mimics-13.1 software program and bone volume length and thickness were measured. Two-sample t-test was used in between-group comparisons and paired sample t-test was used in comparing within-group right and left hand data. Volunteer participants were informed of the study before measurements were taken and they were asked to fill and sign "Informed Consent Forms".

**Findings:** No statistical differences (P>0,05) were identified between groups in terms of weightlifters' and sedentary individuals' ages  $(22.33\pm0.67 \text{ and } 21.78\pm0.52)$ , height  $(169.67\pm1.80 \text{ and } 171.00\pm1.30)$ , weight (70,30±3,60 and 72,20±3,40) and BMI (24,29±0,82 and 24,62±0,84). Right and left arm mass values in the weightlifters' radius were recorded as 50738±2591 mm<sup>3</sup> and 50449±2903 mm<sup>3</sup> respectively, and they were recorded in ulna as 55301±2412 mm<sup>3</sup> and 55507±2822 mm<sup>3</sup> respectively. Sedentary individuals' radius mass values were recorded as 42619±1833 mm<sup>3</sup> and 40504±1348 mm<sup>3</sup> for right and left arms respectively they were identified to be 50471±2317 mm<sup>3</sup> and 48766±1712 mm<sup>3</sup> for ulna. Important data were obtained for bone length as well. Based on data, radius and ulna bone masses of weightlifters both in right and left arms were higher than those of sedentary individuals (P<0,01 and P<0,05 respectively). Radius bone mass in the right arms of sedentary individuals was found to be higher compared to radius bone mass in their left arms (P<0,05). No significant differences were detected between weightlifters and sedentary individuals in terms of bone length both in radius and in ulna (P>0.05). Within-group comparison of right and left bone lengths showed that right radius and ulna bone length values of both weightlifters and sedentary individuals were higher than those of left arm data (P<0.01). No differences were detected between groups in terms of medullary diameter and cortex thickness at radius and ulna corpus level (P>0,05). However, weightlifters' radius cortex thickness was found to be higher than those of sedentary individuals (6,96±0,32 mm and 5,61±0,17 mm respectively, P<0,01). Weightlifters' radius distal terminus bone mineral density (BMD) was recorded to be higher compared to data obtained from sedentary individuals  $(0.703\pm0.025 \text{ gr/cm}^2 \text{ and } 0.507\pm0.019 \text{ gr/cm}^2 \text{ respectively. } P<0.01)$ .

<sup>&</sup>lt;sup>1</sup> Batman University School of Physical Education and Sports Coaching Education Department

<sup>&</sup>lt;sup>2</sup> Selçuk University Veterinary Faculty Department of Anatomy

**Result:** Many studies have presented that mechanical overloading is one of the best stimuli for the adaptation of skeletal structure and enhancement of bone strength in addition to increasing bone mass. Current study found that weightlifters' both right and left arm radius and ulna bone mass were higher than those of sedentary individuals. Existence of numerical value differences especially in sedentary individuals in the comparison of data for right forearm and left forearm mass may be related to the fact that right hand is more dominant in daily life and effects of working with heavy loads may decrease this effect in weightlifters. Parallel to the findings in the literature, weightlifters' radius distal terminus BMD measurement values were found to be higher compared to those of sedentary individuals. Taken as a whole, results of this study presented high values in weightlifters' ossa antebrachii mass. This magnitude was identified to be in bone width instead of bone length and distributed in the periosteal direction. High values in the radius and ulna bone masses, radius cortex thickness and radius distal terminus BMD values can be regarded as indicators of bone quality and strength.

Keywords: 3D Modelling, Bmd, Ossa Antebrachii, Volume, Weightlifting

### OP. 146 TOLERANCE TO ELECTRICAL MUSCLE STIMULATION

Celil Kaçoğlu<sup>1</sup>, Mehmet Kale <sup>1</sup>

#### **Abstract**

**AIM:** The tolerance to electromyostimulation (EMS) training can be define as the ability to tolerate progressively increasing current intensity. The effectiveness of EMS training method is related to the intensity of electrical currents applied during training sessions. Despite this, very little information exists related to tolerance to electrical currents of muscle and nervous. Thus, the aim of this study is to examine that whether the tolerance against to maximum comfortably tolerated electrical current intensity implemented during five weeks of isometric lower body EMS (AB-EMS) training program in sports sciences faculty students (n = 18) between the ages of 18-27 can be increase or not.

**METHOD:** Subjects were completed a LB-EMS training program of a 5 week LB-EMS training program (frequency: 2 sessions/weeks; duration: 15min/session; volume: 60 contractions/session). During each EMS session, current amplitude (range of 4,5–125V) was gradually increased until the maximum tolerated level (pain threshold according to VAS). The level of maximum electrical current intensity values were recorded in the end of the each training session.

**RESULTS:** Tolerance to EMS significantly increased throughout the training program according to Wilks' Lambda test results (Manova) in each three areas (calfs, thighs and buttocks). It is observed that the gradually and linearly increasing of the level of maximal tolerated electrical current values (V) from the first to the last EMS training session.

**CONCLUSIONS:** Our study showed that the tolerance to electrical currents homogeneously increased during the EMS training program in healthy physically active individuals. The mechanism of these tolerance increases remain unclear, however the increase in the current intensity can be depend on increases in pain threshold according to VAS or neuromuscular adaptation. Future studies should be directed to explain the mechanism of tolerance to electrical current.

Keywords: Electromyostimulation, Tolerance, Isometric Training, Current Intensity

<sup>&</sup>lt;sup>1</sup> Anadolu University Faculty of Sport Sciences

# OP. 150 LOAD - POWER RELATIONSHIP IN THE PROPULSIVE PHASE OF FULL SQUAT MOVEMENT

<u>İbrahim Can</u><sup>1</sup>, Hamit Cihan <sup>2</sup>, Erdal Arı <sup>3</sup>

### Abstract

The purpose of this study was to investigate of the load - power relationship during propulsive phase (concentric phase) of full squat (SQ) movement. For this purpose, thirty-two men amateur athletes (age:  $20.4 \pm 1.98$  years; height:  $179.3 \pm 7.23$  cm; weight:  $73.5 \pm 9.85$  kg) who did sports actively and had a basic level of force joined to this study voluntarily. Subjects were performed one repetition maksimal (1RM) strength test and 1RM values in full SQ movement was determinated. Then, loads (20, 30, 40, 50, 60, 70, 80, 90, 100 %) corresponding to different percentages of the 1RM values of subjects were registered by calculating. Finally, subjects were performed full SO movement at the loads corresponding to different percentages of 1RM and power properties during propulsive phase through a dynamic measurement system (T-Force dynamic measurement system) was determined as mean power (MP), mean propulsive power (MPP) and peak power (PP). The descriptive statistics, correlation analysis and one-way analysis of variance (ANOVA) for dependent groups was used as statistical methods for evaluation of datas. According to results; it was concluded that MP and PP values during propulsive phase of full SO movement performed in different loads demonstrate gradually a raising between 20 - 70 % of 1RM and then decreases. On the contrary, it was obtained that MPP values demonstrate gradually a raising between 20 - 60 % of 1RM and then decreases. It was concluded that maximal power values for MPP parameter was reached at loads lifted in 60 % of 1RM, while maximal power values for MP (236,3 W) and PP (1382,5 W) parameters were reached at loads lifted in 70 % of 1RM. Also, it was seen that there are low level, positive and statistically a significant relationship between MP (r = .218; p < 0.05) and PP (r = .264; p < 0.05) parameters during propulsive phase of full squat movement with percentage load values of 1RM, while there are no statistically a significant relationship between MPP and percentage load values of 1RM (r = ,107; p > 0.05). As a result; it was concluded that maximal power values during propulsive phase of full squat movement applied in different loads were reached during lifting performed in moderate loads. Furthermore, it was seen that most powerful correlation between load - power parameters was obtained with PP parameter although correlation coefficient was at low level.

Keywords: Full Squat, Propulsive Phase, Load, Power

# OP. 153 IMPROVEMENT IN ACUTE EXERCISE-INDUCED MUSCULAR DAMAGE AND FUNCTIONAL ADAPTATIONS AFTER A SOCCER SPECIFIC TRAINING

Nima Gharahdaghi<sup>1</sup>, Mohammad Reza Kordi<sup>1</sup>, Abbas Ali Gaeini<sup>1</sup>, Sadegh Abbasian<sup>1</sup> University of Tehran Physical Education

### **Abstract**

**Introduction:** Because of the length of a soccer match (90 minutes), at least 90% of the energy release must be aerobic, players run about 10 km at intensity close to anaerobic threshold or 80–90% of maximal heart rate. The purpose of this study was to investigate the effects of four weeks of high intensity aerobic interval training (HIIT) on physical capacities such as maximum oxygen uptake (VO2max), anaerobic threshold (AT), anaerobic power and muscle damage markers after an exhaustive maximal exercise in soccer players.

<sup>&</sup>lt;sup>1</sup> Gümüşhane University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Karadeniz Technical University School of Physical Education and Sports

<sup>&</sup>lt;sup>3</sup> Ordu University School of Physical Education and Sports

**Methods:** Eighteen players participated in the study, where both the experimental group (EG, n = 12) and control group (CG, n = 6) participated in study which is EG participated in four weeks of HIIT. Training protocol consisted of four bouts of 4 min work periods dribbling a soccer ball around a specially designed track on soccer field. Blood collection was conducted in rest and exhaustion time for CPK and LDH serum level pre- and post-HIIT. Statistical significance was set at P < 0.05.

**Results:** Mean Vo2max improved from 49.14 (4.65) to 51.87 (5.13) ml.kg-1.min-1 in experimental group. Counter movement jump power and maximum anaerobic power increased from 3502 (401) to 3622 (339) watt and 465 (92) to 533 (100) watt, respectively. Time to exhaustion increased from 812 (71) to 856 (74) sec. No significant changes in AT, or Counter movement jump height occurred. Only post-intervention mean anaerobic power for the experimental group in this study was significant. In addition, significant decline between exhaustion times were evident for CPK and LDH serum levels after both exhaustive tests.

**Conclusion:** Our study proved that 4 weeks of soccer specific high intensity aerobic training with ball caused improvement in performance related factors especially for mean anaerobic power and exercise-induced muscular damage. As a conclusion this kind of training could be beneficial for soccer players in 4-week.

Keywords: Aerobic, Anaerobic, High Intensity Training, Muscle Damage, Soccer Players

# OP. 194 EFFECTS OF SWIMMING TRAINING CARRIED OUT AT DIFFERENT ALTITUDES IN ELITE SWIMMERS

 $\underline{\text{Erkan G\"unay}}^1$ , Bekir Çoksevim  $^2$ , Cem Şeref Bediz  $^3$ , Nazmi Saritas  $^4$ 

### Abstract

The aim of this study is to determine the performance improvement of elite level swimmers who applied the same training program for 12 weeks at different altitudes and to determine theeffects of altitude on these athletic performances.

Totally 50 swimmers, 21 female and 29 male living and training at different altitudes and thosewho can get 400-500 scores from FINA system attended to the study. The swimmers wereapplied training applications in terms of the same training program. Swimmers' pre and postage, training age, body height, body weight, body fat percentage, hemoglobine, hematocritevalues were measured and among the performance tests, their 100 metres sprint swimming, 1st, 2nd, 3rd and 4th split times, stroke account post sprint heart rates, pre sprint test and after 5 minutes lactate accumulation rates, T2000 metres swimming test and post test heart rate parameters were determined. In evaluating the data, Kruskall Wallis one direction variance analysis was used in order to determine the inter group differences at non parametric tests while intra group evaluations were carried out with Wilcokson matched two sample test. In presenting the data, the significance level was determined as p<0,05 by giving the median % 25 and 75 dispersions. During the study a meaningful difference was found in one of the physical parameters, malefemale groups' training ages, (p<0,05). No developmental difference which occured through the effect of altitude was seen. Meaningful differences were seen in

<sup>&</sup>lt;sup>1</sup> Dokuz Eylül University School of Sport Sciences and Technology

<sup>&</sup>lt;sup>2</sup> Erciyes University Department of Physiology

<sup>&</sup>lt;sup>3</sup> Dokuz Eylül University Department of Physiology

<sup>&</sup>lt;sup>4</sup> Erciyes University School of Physical Education and Sports

the swimmers' intragroup hemoglobine, hemotocrite,100 metres sprint and post sprint heart rates, T2000 metres swimming test and post test heart rates. Among the groups, significant improvements have been seen in both genders' hemoglobine, hematocrite, T 2000 swimming parameters depending on the altitude. As a result of this study, while an improvement their athletic performances were seen in hemoglobine and hematocrite, swimming economy and endurance of the elite swimmers depending on the training to be done at the different altitudes, other performance levels increased in all groups were thought to performances because of the positive effects of swimming training.

Keywords: Elite Swimmers, Altitude, Swimming Training, performance

### OP. 206 EXERCISE ARTERIAL INDUCED HYPOXEMIA IN ELITE CROSS-COUNTRY AND ALPINE SKIERS DURING MAXIMAL EXERCISE

Selcen Korkmaz Eryılmaz<sup>1</sup>, Metin Polat <sup>1</sup>, Sami Aydoğan <sup>2</sup>

#### **Abstract**

Exercise-induced arterial hypoxemia (EIAH) is defined as a reduction in the arterial blood oxygen level measured as hemoglobin oxygen saturation (SaO<sub>2</sub>) below pre-exercise levels, and can be classified as mild (SaO<sub>2</sub> %93-95), moderate (SaO<sub>2</sub> %88-93) or severe (SaO<sub>2</sub> <%88). Previous research using pulse oximetry indicates that highly trained endurance athletes may exhibit EIAH during maximal exercise. Cross country skiing performance rely heavily on the aerobic capacity. Anaerobic power appears to be better predictors of alpine ski performance. Aim: The purpose of this study was to examine and compare the occurrence of exercise-induced hypoxaemia during maximal exercise in elite cross-country and alpine skiers. Methods: Twenty-eight male athletes, including 14 cross-country skiers (age  $18.1 \pm 2.8$  years, height  $169.7 \pm 4.6$  cm, body mass  $62.2 \pm 6.3$  kg) and 14 alpine skiers (age  $18.5 \pm 3.5$  years, height  $174.8 \pm 3.5$  cm, body mass  $68.4 \pm 9$  kg), all members of the Turkey national team took part in the study. The maximal oxygen uptake  $(VO_{2max})$  was determined using an incremental maximal exercise test on a treadmill (Cosmed Quark PFT-Ergo, Rome, Italy). Time to exhaustion was recorded as the time from the start of the run until the point of exhaustion. At rest before exercise and during the exercise, oxygen saturation (SaO<sub>2</sub>) was measured continuously by pulse oximetry (Spiropalm 6MWT; COSMED). The differences in measures between groups were evaluated by unpaired t-test and p values < 0.05 were accepted as significant. Data are reported as means ± standard deviation (SD). Results: Cross-country skiers had significantly higher VO<sub>2max</sub>  $(67.4 \pm 5.4 \text{ and } 53.9 \pm 6.3, p < 0.001)$  and time to exhaustion  $(10 \pm 1 \text{ and } 7.9 \pm 0.6, p < 0.001)$  than alpine skiers. By comparison there was no difference in resting %SaO<sub>2</sub> between the cross-country skiers (97.9  $\pm$  0.6) and the alpine skiers (97.6  $\pm$  0.7). During exercise test, %SaO<sub>2</sub> ( $\leq$  % 91) was reduced in all athletes at the maximum exercise load and was not found significantly different between cross-country skiers (86.7  $\pm$  1.9) and alpine skiers (85.8  $\pm$  4). Conclusions: The results of this study suggest that elite athletes who have different aerobic fitness levels may exhibit similar exerciseinduced arterial hypoxemia during maximal exercise.

Keywords: Exercise-Induced Hypoxemia, Percent Arterial Oxygen Saturation, Maximal Oxygen Uptake

<sup>&</sup>lt;sup>1</sup> Erciyes University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Ercives University Faculty of Medicine Department of Physiology

# OP. 211 THE EFFECTS OF HIGH INTENSITYINTERVAL TRAINING ONTHEPEAK OXYGEN UPTAKE AND RESTING METABOLIC RATE IN OBESE WOMEN

 $\underline{\text{Funda Coşkun}}^1$ , C. Çağlar Bıldırcın  $^1$ , Çiğdem Özdemir  $^2$ , Özgür Günaşti  $^2$ , Kerem Tuncay Özgünen  $^2$ , Sanlı Sadi Kurdak  $^2$ 

### Abstract

**Purpose:** Even there are some studies about the effects of High IntensityInterval Training (HIIT) in obese women for the weight loss, are less common, compare to the standard training models. The aim of present study wasto evaluate the effects of exercise patterns in the maximum fat burning(Fat<sub>max</sub>) intensity of exercise and corresponding to 90% of peak VO<sub>2</sub>uptake.

**Material and Methods:** 17obese women, age  $39.9 \pm 7.1$  (mean $\pm$ SD), length161.7 $\pm$ 4.9 cm and weight88.2 $\pm$  10.0 kgwere subjected totrainingfor a period of2 months. PeakVO<sub>2</sub> uptakes were evaluated bycardiopulmonaryexercise testing. Resting Metabolic Rates weremeasured usinggas analysis after 12 hours starvation(Quark b<sup>2</sup>). The subjects were participated4 days a week and32 minute for each section of HIIT (Excluding warming up, 4 min. FatMax and 2 min. %90 PeakVO<sub>2</sub>). Siri equation was used to calculate body fat percentage (Fat %) and Martin-Matiegka formula to calculate body muscle percentage (Muscle %). Wilcoxon Paired Two Sample Test was used, p<0.05 and the under values were considered to be significant.

**Results**: At the end of the survey, body weight decreased from  $88.2\pm10.0$  to  $84.8\pm10.3$  kg, body fat percentage (Fat %) from  $31.9\pm2.9$  to  $25.1\pm3.3$  % and the Resting Metabolic Rate (RMR) decreased from  $1289\pm249$  to  $1130\pm258$  kcal/day (p<0.05). Conversely,Peak VO2 uptakesignificantly increasedfrom  $21.3\pm3.5$  to  $24.8\pm3.9$  ml/kg/min (p<0.05). Body muscle percentages (Muscle %) were measured after and before the investigation and there were not found any significant changes.

Conclusion: HIIT program is thought to beadequate to indicate chronic effects of training with the weight loss, decrease infatpercentage and the significant increase on PeakVO2. In contrast, the expected effects onbody muscle percentage (Muscle %) and Resting Metabolic Rate (RMR) were not consistent and this situation could not be assessed in this study.

Keywords: Obese, Fat %, Muscle %, Peak Oxygen Uptake

# OP. 212 THE EFFECTS OF ALTITUDE TRAINING ON SOME ANTHROPOMETRICAND PHYSIOLOGICALVARIABLES OF ELITE SWIMMERS

 $\underline{\text{Funda Coşkun}}^1$ , C. Çağlar Bıldırcın  $^1$ , Çiğdem Özdemir  $^2$ , Özgür Günaştı  $^2$ , Kerem Tuncay Özgünen  $^2$ , Sanlı Sadi Kurdak  $^2$ 

#### **Abstract**

**Purpose:** It is known that there are numerous studies have been made aboutenhancing performance during the camp of altitude training. The main purpose of the present study was to explicate the effects of 3 weeks altitude training on some anthropometric and physiological variables of elite swimmers

**Material and Methods:** 7male swimmers, age  $19.2 \pm 1.8$  years (mean  $\pm$  SD), height  $182.2 \pm 5.9$  cm were evaluated at an altitude of 1850 m for a period of 3 weeks. Resting Heart Rate (RHR) and oxygen saturation of the swimmers were measured at rest state in the morning (Pulse oximetry BCI International). The amount of hemoglobin was determined before and after the camp with the blood

<sup>&</sup>lt;sup>1</sup> Çukurova University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Çukurova University Faculty of Medicine Department of Physiology

<sup>&</sup>lt;sup>1</sup> Çukurova University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Çukurova University Faculty of Medicine Department of Physiology

tests. Siri equation was used to calculate body fat percentage (Fat %) and Martin-Matiegka formula to calculate body muscle percentage (Muscle%). Wilcoxon Paired Two Sample Test was used, p<0.05 and the lower values were considered to be significant.

**Results:** The outcome of the evaluation, body weight decreased from  $77.2 \pm 8.0$  kg to  $76.1 \pm 7.9$ , body fat (%) from  $11.2 \pm 2.0$  to  $9.3 \pm 1.5$  and resting heart rate (RHR)  $54.1 \pm 4.8$  to  $48.1 \pm 2.5$  decreased significantly. On the other hand, significant increases were determined on the body muscle percentages (Muscle%) from  $46.6 \pm .8$  to  $48.8 \pm 1.0$  and the amount of hemoglobin from  $15.0 \pm .4$  to  $15.5 \pm .5$ . Oxygen saturation values were found to be in a balance between 95-96 percent.

**Conclusion:**The decrease ofbody weight, body fat percentage (Fat %) and resting heart rate can be interpreted as an effect of training.But, it is possible to explain the increase at the amount of hemoglobin as a specific result of altitude training. Therefore, it has to be taken into consideration that altitude training can be more advantageous than sea level training.

Keywords: Altitude, Body fat, Body muscle, Hemoglobin

# OP. 216 EFFECT OF AEROBIC TRAINING ON FAT OXIDATION RATE DURING ACUTE SUBMAXIMAL EXERCISE IN YOUNG ADULTS

Şükrü Serdar Balcı<sup>1</sup>, Hamdi Pepe <sup>1</sup>, Serkan Revan <sup>1</sup>, <u>Şükran Arıkan</u><sup>1</sup>, Hasan Akkuş <sup>1</sup>, Firuze Kurtoğlu <sup>2</sup>, Behiç Serpek <sup>2</sup>

#### Abstract

Purpose: The aim of this study was to investigate the effect of endurance training on changes in hormone levels and energy metabolism at rest, during exercise, and recovery from exercise in young adults

Method: Nineteen healthy young adult volunteers participated in the study. The volunteers underwent 60 min of bicycle exercise at 60% of maximal oxygen uptake (VO<sub>2max</sub>). The expired air was measured and analyzed breath-by-breath using an automated online system was monitored and recorded at rest, during exercise, and recovery from exercise. All subjects participated in an endurance training program, which consisted of cycling on an ergometer at 50-70% of the maximum heart rate for 60 min 4 days/wk for 8 wk, under direct supervision. Blood samples were taken at rest, every 15 min throughout exercise, and 60 min post-exercise recovery period in both the pre- and post-training periods. The plasma concentrations of growth hormone, adrenaline, ghrelin, leptin, glucagon, testosterone, estradiol, and cortisol were measured from blood samples obtained during the experiments. Statistical evaluation of the data was accomplished by using a two- and three-way analysis of variance with repeated-measures design.

Results: Fat oxidation rates at rest, during exercise, and recovery from exercise in post-training were higher than pre-training period (P<0.001). The effect of training on plasma concentrations of ghrelin, estradiol and cortisol at rest, during exercise, and recovery from exercise was significant. In spite of that, the changes in plasma concentrations of growth hormone, adrenaline, ghrelin, leptin, glucagon, testosterone, estradiol, and cortisol during the test period before and after training were similar for women and men (P>0.05).

Conclusion: The study results suggest that endurance training increased fat oxidation rates while decreased CHO oxidation rates. Also, it can be said that endurance training and sex can affect both substrate oxidation and hormone secretion at rest and/or during acute exercise.

Keywords: Endurance Training, Acute Submaximal Exercise, Fat Oxidation, Hormones

<sup>&</sup>lt;sup>1</sup> Selçuk University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Selçuk University Faculty of Veterinary Medicine

# OP. 245 RELATIONSHIP OF ISOKINETIC HAMSTRINGS-TO-QUADRICEPS PEAK TORQUE RATIO WITH VERTICAL JUMP AND SPEED PERFORMANCE IN SOCCER PLAYERS

Zait Burak Aktuğ<sup>1</sup>, Erbil Harbili <sup>2</sup>, Sultan Harbili <sup>2</sup>

### **Abstract**

**Purpose:** The purpose of this study was to compare peak torque values of hamstring and quadriceps muscles of both legs during isokinetic concentric extension and flexion of the knee joint in 17-19 years old soccer player sand to investigate the relationship between peak torques of the hamstring and quadriceps muscles and vertical jump height and duration of 30-m sprint.

**Method:** Thirty-six soccer players playing in infrastructure of Professional football clubs in Konya participated in the study. In soccer players, concentric extension and flexion strength of the knee was measured using isokinetic dynamometer(Cybex Norm, CSMI, Stoughton, Massachusetts, USA) at angular velocity of 60 deg.s<sup>-1</sup> and 240 deg.s<sup>-1</sup> with 10 and 15 repetitions, respectively. Peak torque of flexor and extensor muscles of both knees and hamstring/quadriceps ratio (H/Q) were evaluated. Bisedes, the vertical jump height and duration of 30-m sprint were measured with jumpmetre (Takei, Japan) and photocell, respectively. The paired t-test was used for differences between the peak torque values of dominant and nondominant leg, and the relationships between peak torque values, vertical jump and 30-m sprint performance were evaluated using Pearson Product Moment Correlation analysis. Significant level was set at p<0.05.

Findings: There was no significant difference between extensor and flexor peak torques of dominant and nondominant legs at angular velocity of 60 deg.s<sup>-1</sup>. Significant difference was not found between extensor peak torque of dominant and nondominant legs at angular velocity of 240 deg.s<sup>-1</sup>. However, flexor peak torque of dominant leg was significantly greater than that of nondominant leg at angular velocity of 240 deg.s<sup>-1</sup> (p<0.05). In addition, H/Q ratio of dominant leg was significantly greater than that of nondominant leg at angular velocity of 60 deg.s<sup>-1</sup> (p<0.05). H/Q ratio of both legs was similar in each other at angular velocity of 240 deg.s<sup>-1</sup>. There was no significant relationship between H/Q ratio, vertical jump and 30-m sprint performance. There was significantly positive but weak correlation between relative strength of Quadriceps muscles of dominant leg and vertical jump at angular velocity of 60 deg.s<sup>-1</sup> (p<0.05). There was significantly negative but weak correlation between relative strength of Quadriceps muscles of dominant and non-dominant leg and 30-m sprint performance at angular velocity of 60 deg.s<sup>-1</sup> (p<0.05). There was significantly negative but weak correlation between relative strength of Hamstring muscles of dominant and relative strength of Quadriceps muscles of dominant and non-dominant muscles 30-m sprint performance at angular velocity of 240 deg.s<sup>-1</sup> (p<0.05).

Conclusion: In conclusion, the greater H/Q ratio of dominant leg at angular velocity 60 deg.s<sup>-1</sup> as a indicator of maximum strength and flexor muscle strength of dominant leg at angular velocity 240 deg.s<sup>-1</sup> as a indicator of strength endurance than that of non-dominant leg showed that Hamstring muscles of dominant leg and its strength are important in soccer. Relationship between Quadriceps muscles of dominant leg and vertical jump performance supported that maximum strength of the knee extensor muscles has a role indicator in vertical jump performance. On the other hand, relationship between flexor and extensor muscle strength of both legs and 30-m sprint performance showed that strength endurance is important as maximum strength as in acceleration.

Keywords: Soccer, Isokinetic Strength, Vertical Jump, 30-m Sprint

<sup>&</sup>lt;sup>1</sup> Adıyaman University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Selçuk University School of Physical Education and Sports

# OP. 247 THE EFFECTS OF INTENSIVE TRAINING ON SELECTED SEX HORMONES IN YOUNG WRESTLERS

 $\underline{\text{Faruk Yamaner}}^1$ , Yetkin Utku Kamuk  $^1$ , Taner Bayraktaroğlu  $^2$ , Mustafa Gümüş  $^3$ , Tevfik Cem Akalın  $^3$ 

### **Abstract**

Aim: The effects of intensive training on hormones attracted many scientists. Many studies were done on adult athletes but as adolescence is known to be a crucial period for growth, sports training during this time may have positive or negative effects on some physiological processes as growth. Thus, the aim of the present study was to evaluate the effect of an 8-month intensive training on anabolic (IGF-1, LH, FSH, and testosterone) and catabolic hormones (cortisol) in young adolescent male wrestlers. Revealing the effects of intensive training in young athletes would help trainers, coaches and athletes understand the hormonal response differences to intensive training in children and plan or adjust their training schedules and training intensity.

Method: 45 volunteer subjects (13.94±.57) were selected as the experiment group and a control group of 35 non-athlete subjects (13.93±.51) were also assigned. The training group (TG) attended to a wrestling training program for eight months for 5 days a week 90 mins per day. The control group (CG) which was composed of sedentary healthy young males and did not participate into any preplanned exercise session. Luteinising hormone, follicle stimulating hormone, insulin-like growth factor-1, testosterone and cortisol levels of both the experiment and the control groups were evaluated. Descriptive statistics were calculated as mean±sd for appropriate variables. Homogeneity of data was tested by using Kolmogorov-Smirnov test of homogeneity and found to be homogenous (p>.05). Paired samples t-test was used to analyse the significance of the differences between pre- and post-tests. Statistical significance level was set at p<.05.

Findings: In the experiment group, it was found that changes in LH, T, and FSH (p<.01) were significant but there were no significant changes in IGF-1 and C (p>.05). No significant difference was observed in LH, FSH, T, C, or IGF-1 (p>.05) but BMI (p<.05) in the control group.

Conclusion: In conclusion, long-term intensive training caused alterations in hormonal responses in the young wrestlers.

Keywords: Sex Hormones, Testosterone, LH, FSH, IGF-1, Cortisol, Adolescent, Wrestler, Intensive Training

# OP. 259 RELATIONSHIP BETWEEN AGILITY AND SPRINT, POWER AND STRENGTH IN YOUNG FOOTBALL PLAYERS

 $\underline{\text{F. Murat \"Ozdemir}}^1$ , Atakan Yılmaz $^1$ , Aydan Aytar $^2$ , Ayşe Kin-İşler $^3$ 

### **Abstract**

**Purpose:** The purpose of this study was to determine the relationship among agility, sprint, power and strength in young football players.

**Methods:** A total of 75 young football players of a football club in Turkish Spor Toto Super League at U15 (n=20), U16 (n=19), U17 (n=18) and U18 (n=18) age groups participated in this study voluntarily. Agility of the football players were determined by 505 Agility Test, sprint ability was determined by

<sup>&</sup>lt;sup>1</sup> Hitit University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Bülent Ecevit University Faculty of Medicine

<sup>&</sup>lt;sup>3</sup> Bülent Ecevit University School of Physical Education and Sports

<sup>&</sup>lt;sup>1</sup> Başkent University Department of Sport Sciences

<sup>&</sup>lt;sup>2</sup> Başkent University Department of Physical Therapy and Rehabilitation

<sup>&</sup>lt;sup>3</sup> Hacettepe University Department of Sport Sciences Department of Exercise and Sport Science

20 meters sprint and flying 20 meters sprint tests and anaerobic power was determined by the squat and counter movement jump test. Participants' peak isokinetic concentric knee extension and flexion strength were determined from both legs at  $60^{0}$ s<sup>-1</sup> ve  $180^{0}$ s<sup>-1</sup> angular speeds.

**Results:** According to the Pearson Product Moment Corelation analysis in U15 young footballers there was a significant correlation between agility and right leg peak knee extension strength at  $60^0$ s<sup>-1</sup> (r=-0.619; p=0.004) and in U17 young football players significant correlation was found between agility and left leg peak knee extension strength at  $180^0$ s<sup>-1</sup> (r=0.526; p=0.028) while no significant correlations were observed between agility and the rest of knee strength values in these age groups (p>.05). In U16 and U18 football players no significant correlations were observed between agility and isokinetic strength (p>.05). When the relation between agility and sprint are taken into consideration, it is seen that there were no significant correlations in U15, U16, U17 and U18 football players (p>.05). In addition the only significant correlation between agility and the squat (r=-0.474; p=0.047) and the counter movement jump (r=-0.509; p=0.031) power values was observed in U18 football players, while no significant correlations were found in the rest of the age groups.

**Conclusion:** It can be said that the relation between agility and sprint, power and strength valued varied according to different age groups.

Keywords: Young Football Players, Agility, Sprint, Power, Strength

# OP. 270 IMPORTANCE OF VIBRATION AS NON-INVASIVE METHOD ON ACTIVATION OF DIFFERENT MUSCLE FIBER TYPES

### Deniz Simsek<sup>1</sup>

### Abstract

**Purpose**: The purpose of the present study is to determine the effects of whole body vibration (WBV) stimuli at low (2 mm) and high (4 mm) amplitudes and various frequencies (30-35-40 Hz), on the slow-twitch (ST) and fast-twitch (FT) fiber activity during leg squats.

**Methods**: Thirty-two students from the faculty of sports science were included in the study. The study population was divided into two groups according to the distribution ratio of the ST and FT fibers (FT Group: n=17, 22.6±0.4 years, 179±1.8cm, 77.8±2.0 kg; ST Group: n=15, 20.1±0.4 year; 178±1.2 cm; 72.4±1.7 kg). Whole body vibration was randomly given by a Compex WINPLATE (Galileo 2000, Novotec Medical GmBH, Germany) device at 30, 35, and 40 Hz frequencies and high (4 mm) or low (2 mm) amplitudes. All experimental conditions lasted for 30 seconds. Superficial EMG signals were recorded from the tibialis anterior (TA), gastrocnemius medialis (GM), rectus femoris (RF), biceps femoris (BF), vastus lateralis (VL), and vastus medialis (VM) muscles. The recordings were obtained using a 16-channel Delsys Wireless Trigno Electromyography (EMG) system. EMG signal sampling rate and bit rate of the analogue-digital converter were set to 2000 Hz and 16 bits, respectively. All EMG signals were normalized to the maximum EMG signals recorded during maximal voluntary contractions and presented as %MVC. Statistical analyses were performed using IBM Statistics 12.0. The Shapiro-Wilk test was used to analyze whether the data fit a normal distribution, and the t-test was used for the normally distributed data of the independent groups. Different frequency measurements taken to analyze the effects of frequency at specific amplitudes were evaluated by ANOVA analysis. Based on variance homogeneity test, the Tukey or Tamhane methods were used for multiple comparisons. The two-sided ANOVA analysis was used to determine the differences between the EMG activities of the two muscle fiber types (ST and FT) at a specific amplitude and frequency. The Holm-Sidak method was used for multiple comparisons. The statistical significance level was accepted as P<0.05.

**Results:** Study results showed that whole body vibration stimuli given at different frequency and amplitudes resulted in a significant increase in the lower-body muscular activation (p<0.05). On the other hand, when the muscles and their fiber composition were considered separately, it was noticed

<sup>&</sup>lt;sup>1</sup> Anadolu University Faculty of Sport Sciences

that the highest frequency did not always translate into the highest muscular activation. Compared to the baseline values, muscles with a higher density of ST fiber group showed the highest EMG%MVC value at 4 mm amplitude but at different frequencies (TA:30Hz; GM:40Hz; VM.35Hz; RF 40Hz; VL:35Hz; BF:35Hz) during dynamic contractions (p<0.05). Among the muscles with a higher density of FT fibers, GM, RF, and VL represented the highest EMG%MVC value at 40 Hz and 4 mm, while the others (TA, VM, and BF) reached the highest activation at 35 Hz and 4 mm (p<0.05).

Conclusion: When the ST and FT fiber compositions of the investigated leg muscles were compared, it was noted that the fatigue-resistant FT group responded to the dynamic whole body vibration stimuli with a greater muscular activation. On the other hand, as the ST group was sensitive to fatigue and compared to the baseline values, the percentage of increase in the activation values of this group was recorded as higher with increasing frequency and amplitudes. As a non-invasive method, whole body vibration provided positive results to distinguish fatigue-resistant and fatigue-sensitive fibers from each other. This method can be used as a practical alternative to "muscle biopsy" and "phosphorus magnetic resonance spectroscopy" methods, to canalize the individuals in the various branches of sports at an early age. In addition, the measurement of muscle fiber composition can be beneficial to determine the optimal vibrational exercise program for the athletes who perform branches of sports that require extensive use of the resistant and sensitive muscle fibers.

Keywords: Vibration, Dynamic, Emg, Fatigue, Muscle Fiber

# OP. 276 PROPOSAL OF A NEW EQUATION TO CALCULATE HIGHLY RELIABLE FATIGUE INDEX IN WINGATE ALL-OUT TEST

Ekim Pekünlü<sup>1</sup>, Ozgur Ozkaya<sup>1</sup>, Bulent Yapıcıoglu<sup>1</sup>

### Abstract

**PURPOSE**: The purpose of the present study is to propose a new and more reliable fatigue index (FI) equation that is based on mechanical work (MW) calculated using instantaneous power data recorded at each millisecond throughout 30 s Wingate All-out Test (WAT).

**METHOD**: Twenty-one well-trained male athletes (peak power [PP]:  $14.7 \pm 1.3 \text{ W} \cdot \text{kg}^{-1}$ ) performed a series of WAT trials on Monark 894E Peak Bike cycle-ergometer (Monark, Vansbro, Sweden) – using 10% of their body mass as the testing load— separated by minimum of 48 hours. These trials were continued until the PP difference between consecutive two trials were less than 5%. Traditional fatigue-related indices of WAT (FI and power drop [PD]) were calculated using power data obtained from four diffrent time intervals (5 s, 3 s, 1 s, and 1 ms intervals). Accordingly, reliability levels of 8 different independent variables (four FIs and four PDs) were compared with that of our proposed new FI (FI<sub>MW</sub>).

**RESULTS**: Intraclass correlation coefficient (ICC), coefficient of variation (CV) and minimum detectable change percentage with 90% confidence (MDC<sub>90</sub>) for traditional FIs calculated using power data obtained from four diffrent time intervals were  $\leq 0.860, \geq 5.71\%$  and  $\geq 12.7\%$ , respectively. These values for traditional PDs were  $\leq 0.923, \geq 6.64\%$  and  $\geq 14.0\%$ , respectively. Our proposed FI<sub>MW</sub> had the highest reliability level between these fatigue-related indices of WAT since it had the highest ICC (0.938), the lowest CV (4.51%) and MDC<sub>90</sub> (10.2%).

**CONCLUSION**: According to aforementioned results, embedding the indices of  $FI_{MW}$  into the software of Monark 894E Peak Bike cycle-ergometer might constitute a critical step to make the most widely used anaerobic power test -WAT- more reliable for the assessment of endurance and fatigability levels. In addition, trainers that use WAT to track anaerobic performance changes in their athletes might consider  $FI_{MW}$  as a reliable indices for the assessment of anaerobic endurance and fatigability levels.

<sup>&</sup>lt;sup>1</sup> Ege University School of Physical Education and Sports

Keywords: Cycle Ergometer, Instantaneous Power Data, Mechanical Work, Power Drop

# OP. 299 EFFECTS OF THE CHANGES, DUE TO SWIMMING, IN THE BODY WATER BALANCE ON SWIMMING PERFORMANCE

Burcu Ertaş Dölek<sup>1</sup>, İbrahim Yıldıran <sup>2</sup>, Mitat Koz <sup>1</sup>

- <sup>1</sup> Ankara University Faculty of Sport Sciences
- <sup>2</sup> Gazi University School of Physical Education and Sports

#### Abstract

**Objective:** The purpose of this study, it has been aimed to find an answer to the question whether liquid is lost throughout these trainings and if it is, what are its effects on one's performance.

**Methods:** Totally 30 swimmers (age:15.36±1.03 year), 15 girls (age:15.0±0.84 year) and 15 boys (age:15.73±1.10 year), who ranked first five in their age group in Turkey championship, have taken part voluntarily in the study whose topic is "Effects of the changes, due to swimming, in the body water balance on swimming performance". Years of experience of the swimmers are 8±1.16 year. Either sex group is composed of three swimmers of each style (butterfly, breaststroke, backstroke, free style and medley). Within the study, the measurements of blood hematocrit value, urine density, total body water percentage, body weight and 50m free style performance have been made. In the analyses of the data provided by our study, SPSS 15 program has been used and a cut of point in all the statistical analyses has been taken as 0.05.

**Findings:** After the trainings which are done without water reinforcement, it has been observed that for either sex, hematocrit value and urine density increased (p<0.05), body weight and total body water percentage decreased (p<0.05) and the performance in 50m free style remained the same. However, after the trainings with water intake, it has been observed that the performance in 50m free style increased.

**Results:** Regarding swimming that is not considered to cause water loss as being performed in water, it has been determined that the water intake affects the performance. As the water that is consumed during the trainings which are done prior to a competition directly affects the race performance, water consumption is critically important as to the rankings.

Keywords: Swimming, Body Water, Water Balance, Performance

# OP. 306 RELIABILITY AND VALIDITY OF NEW TESTS ON AGILITY AND SKILL FOR FEMALE AMATEUR SOCCER PLAYERS

 $\underline{\text{Mehmet Kutlu}}^1$ , Hakan Yapıcı  $\underline{^2}$ , Abdullah Yılmaz  $\underline{^3}$ 

#### **Abstract**

**Purpose:** The aim of this study was to reevaluate the Agility and Skill (AS) test was recently developed to assess females' agility and skill. **Methods:** A tests/retests measurement and comparisons, including AS tests, 20m Sprint, T- Drill, CODAT and IAR agility tests, were used to assess soccer players physical performance. Thirty- four amateur female soccer players (age  $20.8 \pm 1.9$  years; height  $166 \pm 6.9$  cm; weight  $55.5 \pm 5.8$  kg) were recruited. In determining the reliability and usefulness of the tests, paired samples t-tests, intra-class correlation coefficients (ICC), typical error (TE), coefficient of variation (CV), and differences between the TE and smallest worthwhile change (SWC) statistics were used. **Results:** Test results showed no significant differences between sessions

 $<sup>^{1}</sup>$  Kırıkkale University Faculty of Education Department of School of Physical Education and Sports s Teaching

<sup>&</sup>lt;sup>2</sup> Kırıkkale University School of Physical Education and Sports

<sup>&</sup>lt;sup>3</sup> Kırıkkale University Faculty of Science and Letter Department of Statistic

(P>0.01). There were higher intra-class correlations between the test and retest values (r=0.94 - 0.99) for all tests. TE values were below the SWC0.5, indicating the "good" usefulness of these tests. A perfect Pearson correlation between the AS tests (r=0.98) was found, and there were moderate-to-large levels of correlation between the AS tests and others (r=0.37 - r=0.56). **Conclusions:** These study results suggest that the AS tests are reliable and valid tests for female soccer players and have unique value in assessing the integrative agility and skill capability of soccer players.

Keywords: Agility, Skill, Fitness Test, Female Soccer

# OP. 319 EFFECTS OF MENSTRUAL CYCLE ON RUNNING ECONOMY: CALORIC EVALUATION

Bircan Akdoğan<sup>1</sup>, Tahir Hazır <sup>2</sup>

- <sup>1</sup> Anadolu University Faculty of Sport Sciences
- <sup>2</sup> Hacettepe University Faculty of Sport Sciences

#### **Abstract**

Running Economy's (RE) traditional unit is ml.kg<sup>-1</sup>.km<sup>-1</sup>. The oxgyen caloric unit costs change depend on exercise metabolism. Therefore running economy is evaulated with kcal.kg<sup>-1</sup>.km<sup>-1</sup> unit recently. The exercise metabolism also is change during different phases of menstrual cycle. The purpose of this study was to investigate effecst of menstrual cycle on RE. Eleven healty female athletes (age:  $21.18 \pm 3.65$  year, height:  $170.2 \pm 6.6$  cm,  $VO_{2max}$ :  $49.25 \pm 9.15$  ml.kg<sup>-1</sup>.dk<sup>-1</sup>, menstrual cycle:  $29.8 \pm 0.98$ ) with a regular menstrual cycle were tested anthropometric variables (Body mass, 7 sum of skinfold, body fat percentage, lean body mass), resting VO<sub>2</sub>, lactate (LA), heart rate (HR), minute ventilation(V<sub>E</sub>), respiratory Exchange ratio (RER) and RE was determined at %75 %85 and % 95 of speed at 3.5mmol lactate threshold on running treadmill at midfoliküler(MF) (7-9.days) and luteal phase(LF) (21-23.days) of their menstrual cycle. MF and LF were confirmed by hormonal analyzes(Progesterone MF =  $1.79 \pm 1.09$  nmol.L<sup>-1</sup>, LF =  $37.78 \pm 15.08$  nmol.L<sup>-1</sup>; p<0.05, Estradiol MF =  $292.68 \pm 188.09 \text{ pmol.L}^{-1}$ , LF =  $589.70 \pm 262.25 \text{ pmol. L}^{-1}$ ; p<0.05). RE was evulated ml.kg 1.min<sup>-1</sup>, ml.kg<sup>-1</sup>.km<sup>-1</sup> and kcal. kg<sup>-1</sup>.km<sup>-1</sup> from caloric unit cost of VO<sub>2</sub>. Weir's formulation was used to calculate caloric cost of VO2. The effects of menstrual cycle on running economy is determined with 2 x 3 (Phase x Speed) Two-Way Anova for Repeated Measures. There was no significant differences between anthropometric and resting metabolic measurements during different phase of menstrual cycle (p>0.05). RER values were similar measuring during RE between phases (p>0.05). In all three units (ml-kg<sup>-1</sup>.min<sup>-1</sup>,ml.kg<sup>-1</sup>.km<sup>-1</sup> and kcal.kg<sup>-1</sup>.km<sup>-1</sup>) RE that was measure at LF was better than MF(p<0.05). RE that was evaluated with ml.kg<sup>-1</sup>.min<sup>-1</sup> was significantly different at %75, %85 and %95 of speed at lactate threshold. In contrast, when assed with ml.kg<sup>-1</sup>.km<sup>-1</sup> and kcal.kg<sup>-1</sup>.km<sup>-1</sup>, RE was found stable and independet from speeds(p>0.05). Increasings were important in HR, LA and RER which were recorded during RE at incremental speed(p<0.05). The findings of this study the menstrual cycle has no effect of anthropometric variables and resting metabolic rate. RE that was measured at LF was better than MF and RE was stable and indepent from running speed when evalutaed with ml.kg<sup>-1</sup>.km<sup>-1</sup> and kcal.kg<sup>-1</sup>.km<sup>-1</sup>.

This work was supported by the Scientific and Technological Research Council of Turkey. Project Number: 213S087

Keywords: Menstrual Cycle, Running Economy, Caloric Evaluation

# OP. 320 THE EFFECTS ON SOME MOTOR SKILLS OF PHYSICAL EDUCATIONAND SPORTS SCHOOL STUDENTS OF PLYOMETRIC TRAINING

<u>Ercüment Erdoğan</u><sup>1</sup>, Alparslan İnce<sup>1</sup>, Özgür Dinçer<sup>1</sup>, Hasan Sözen<sup>1</sup>, Burkay Cevahircioğlu<sup>1</sup>, Erdal Arı <sup>1</sup>

### **Abstract**

The aim of purpose was to examine the effects on some motor skills of School of Physical Education and Sports's school students of plyometric training. The total 20 School of Physical Education and Sports's school students joining to this study as volunteer considered of thirteen male (age:  $20,6\pm1,4$  years) and seven female (age:  $20,1\pm1,6$  years). The plyometric training was performed to students as half-weekly over eight week period. The pre-test values of students were determined before eight week training period and post-test values of students were determined after eight week training period. The datas collected were analyzed by descriptive statistics and Wilcoxon signedrank test for paired samples analyze technique at SPSS 14.0 statistic package programme.

According to analyze results; it was seen significiant difference pre-test (flexibility test:  $27,40\pm8,61$  cm., horizontal jump test:  $217\pm38,91$  cm., vertical jump test:  $23,16\pm6,04$  cm.; ilionis agility test:  $17,62\pm1,24$ sec.; 30 m. sprint test:  $45,78\pm5,29$  sec.; 15 second jump test:  $14,65\pm0,6$ ; anaerobic power test:  $2136\pm643,3$  m.) and post-test (flexibility test:  $30,51\pm7,35$  cm., horizontal jump test:  $236\pm37,04$  cm., vertical jump test: $236\pm37,04$  cm., vertical jump test: $23,61\pm9,42$  cm.; ilionis agility test:  $16,48\pm1,18$ sec.; 30 m. sprint test:  $44,53\pm4,77$  sec.; 15 second jump test:  $15,75\pm1,25$ ; anaerobic power test:  $2755\pm842$  m.)results (p<0.001).

Consequently, it was determined that eight week plyometric training period had effect on development some motor skills as flexibility, sprint, agility, rapidity, strength of School of Physical Education and Sports s school students.

**Keywords: Plyometric Training, Motor Skills** 

# OP. 323 SOME OF THE LOWER EXTREMITY STRENGTH TRAINING AND TECHNICAL PARAMETER SOFT MOTOR ON MALE SOCCER PLAYERS DURING PREPARATION

<u>İlyas Özdemir</u><sup>1</sup>, Adem Civan <sup>2</sup>

#### **Abstract**

Aim: The goal of this study is to analyze the impact of the football training and additional lower limb power training having been applied during an 8—week preparation stage to young football players' leg strength, anaerobic and aerobic power, speed, flexibility, dribbling, pass and shooting parameters. For this purpose, young football players were applied some motor and technical tests in order to find a solution for the study.

Methods: Totally 45 students attended in this study. Playing in Kırklareli Trakya Fener Football Club, 15 of the 30 football players were the 1st experimental group (age:17.33  $\pm$  0.72 year, height: 170.60  $\pm$  4.64 cm, weight: 67,96  $\pm$  10,51 kg), and 15 of them were the 2nd experimental group (age: 16.66  $\pm$  0.48 year, height: 170.13  $\pm$  6.55 cm, weight: 64,16  $\pm$  7,93 kg) and 15 sedentary learners (age: 16.53  $\pm$  0.51 year, height: 168.73  $\pm$  4.43 cm, weight: 63,19  $\pm$  3,20 kg) were also included. Height and weight measures were made in order to determine physical properties. Leg strength, vertical jump, flexibility and shuttle run test were done to determine motor skills. Mor and Christian football ability tests which include dribbling, pass and shooting tests were carried out so as to determine football abilities of the participants. One–Sample Kolnogorov–Smirnov test was applied in order to determine the distribution of the data. Paired–Samples T Test was done for in–group comparison. Variance Analysis was done

<sup>&</sup>lt;sup>1</sup> Ordu University School of Physical Education and Sports

<sup>&</sup>lt;sup>1</sup> Ministry of National Education Ergun Korkmaz Industrial Vocational High School

<sup>&</sup>lt;sup>2</sup> Selçuk University School of Physical Education and Sports

for inter-group comparison. Turkey HSD multi-comparison test was done to determine in which group the difference occurred. 0.05 stage was taken for the difference significance.

Results: Many significant differences were determined in the in–group pretest–posttests results of the 8–week preparation stage training; in the first and second experimental groups, leg strength, anaerobic power, MakVO2, flexibility and shooting parameters, and also in pass and 20m speed parameters in the first experimental group, only in 20m speed parameters in control group (P<0,05). In dribbling parameters there was no significant difference determined (P>0,05).

In inter–group comparisons, there was a significant difference between the 1st and 2nd groups and the control group; leg strengths, pretests and posttests' parameters of anaerobic power, in pretest parameters of speed, flexibility shooting and pass. Moreover, there was a significant difference between the first experimental group and the second experimental group – the control group, and between the second experimental group and the control group in terms of VO2max, speed, flexibility, pass and shooting parameters (P<0,05). After all, there was not a significant difference in the body weight and dribbling pretest and posttest results or in the pretest results of VO2max (P>0,05).

Conclusion: It can be ensured that the preseason 8—week trainings have positive effects on motor skills. Also, lower limb power training has a positive effect on pass and shooting hits. All these results show that there is a close relationship between performance and the level of technical ability. **Keywords: Football: Preparation Stage: Training** 

# OP. 363 CALCULATION OF ENERGY CONSUMPTION BY THERMAL BEHAVIOR DATA IN EXERCISE

Görkem Aybars Balcı<sup>1</sup>, Özgür Sokat<sup>2</sup>, Tahsin Başaran<sup>3</sup>, Muzaffer Çolakoğlu<sup>1</sup>

- <sup>1</sup> Ege University School of Physical Education and Sports
- <sup>2</sup> İzmir Institute of High Technology Department of Energy Engineering
- <sup>3</sup> İzmir Institute of High Technology Department of Architecture

#### **Abstract**

**Introduction**: There is no analyzing method available for non-invasive measurement of calculating energy consumption to exercise without wearing an apparatus during competitions, laboratory tests or training. The purpose of the study is to calculate energy consumption without wearing an apparatus by using thermal responses of human body in exercise with infrared thermographic calorimetry (ITC) method. To the best of the author's knowledge, this is the first study that aims calculating energy consumption in exercise with the ITC method.

**Method:** 11 male moderate trained athletes participated to the study voluntarily (VO<sub>2max</sub>:

54±9.9mL·min<sup>-1</sup>·kg<sup>-1</sup>; age: 22.2±3.7 years; height: 181±6.3 cm; weight: 73.8±6.9 kg). Participants performed two familization sessions, submaximal test and aerobic power tests sessions and then, constant workload submaximal session was performed at corresponding %60 oxygen consumption levels by using bicycle ergometer in climatic chamber. The cumulative energy consumption data assumed as ITC data calculated by conditioned exercise environment temperature, relative humidity, pressure and air velocity with skin surface temperatures obtained by using thermal camera and core temperature values measured by taken a sensor . ITC data were compared with oxygen consumption and respiratory exchange ratio results obtained from respiratory gas analyzes with indirect calorimetry (IC). Results were evaluated paired samples t-test and Pearson r correlation.

**Results**: Main results show that in submaximal exercise; between ITC and IC, 2 moderate and 3 weak correlations were found in participants; ITC and IC relative (%) differences between participants, 7 strong, 6 moderate, 14 weak correlations, and after extracting first 4 minutes data, 22 strong, 12 moderate, and 13 weak correlations were found. Moreover, skin temperature decreased during first 8 minutes of the exercise and, later on, it increased constantly until the end of exercise ( $p \le 0.05$ ). Standart deviation of thermal energy values stored in the body range remarkably between subjects during the first 6 minutes of the experiments.

Conclusion: It is shown that, ITC could replace IC method for calculating energy consumption in

exercise under steady state condition. In the first 4 minute part in exercise, correlation between ITC and IC values are weak because of unsteady thermal energy storage behavior of human body at the beginning of exercise and getting steady oxygen consumption at the third minute approximately. Accordingly, it is thought that the energy balance formulation for ITC calculation was not enough for estimating energy consumption during exercise and consequently, new correlations within ITC method should be created for exercise condition in future studies. This new ITC formulations may be a valid method for calculating energy consumption without an apparatus during exercise.

This study entitled "Calculation of energy consumption by thermal behavior data in exercise" was presented in 14th National Sports Medicine Congress, December 12-14, 2013, Izmir, Turkiye.

Keywords: Exercise, Thermal Camera, Non-Invasive, Thermoregulation

# OP. 364 EXERCISE-INTENSITY AT PEAK STROKE VOLUME VERSUS VO2MAX AND SHORT VERSUS LONG INTERVALS MAY BE MORE EFFICIENT TO YIELD GREATER TIME SPENT AT HIGH STROKE VOLUME WITH LESS PHYSIOLOGICAL STRESS

Muzaffer Çolakoğlu<sup>1</sup>, Özgür Özkaya<sup>1</sup>, Görkem Aybars Balcı<sup>1</sup>, Bülent Yapıcıoğlu<sup>1</sup> Ege University School of Physical Education and Sports

#### **Abstract**

**Introduction:** Stroke volume (SV) improvement, rather than arterio-venous  $O_2$  difference or heart rate (HR), is the main factor of  $VO_{2max}$  development. The purpose of this study was to evaluate SV responses obtained by exercise intensities corresponding to peak SV (SV<sub>peak</sub>) versus traditional  $VO_{2max}$  and short versus long intervals (SI vs. LI).

**Method:** Nine moderate to well-trained male athletes competing at a regional level specialists of cyclist, track and field volunteered to take part in the study (age:  $24.2\pm4.1$  years; body mass:  $75.2\pm5.8$  kg; height:  $181\pm7$  cm; body fat:  $13.7\%\pm1.7\%$ ;  $VO_{2max}$ :  $59.71\pm7.4$  mL·min<sup>-1</sup>·kg<sup>-1</sup>). Following familiarization sessions,  $VO_{2max}$  was determined, and then,  $SV_{peak}$  was evaluated using exercise intensities corresponding to 40 to 100% of  $VO_{2max}$  by nitrous-oxide re-breathing method. SI and LI were performed by using both  $SV_{peak}$  and  $VO_{2max}$  loads. All procedures were performed in a climatic chamber. Results were evaluated paired samples t-test and Pearson r correlation.

**Results:** Main results showed that greater SV responses obtained from SI versus LI corresponding to both of  $SV_{peak}$  and  $VO_{2max}$  loads (p $\leq$ 0.05). SV responses did not decrease in continuing loading phases of SI (p $\geq$ 0.05), while they were gradually decreasing in continuing loadings in LI (p $\leq$ 0.05). Exercising to recovery SV differences were lower in  $SV_{peak}$  compare to  $VO_{2max}$  loads (p $\leq$ 0.05). Also, SI's SV responses were higher at  $SV_{peak}$  than  $VO_{2max}$  loads but this gap didn't significant (p $\geq$ 0.05).

**Conclusion:** Present study is showed that time spent near to  $SV_{peak}$  throughout training session was greater with the exercise intensity corresponding to individual  $SV_{peak}$  and SI modality compare to  $VO_{2max}$  and LI. Moreover  $SV_{peak}$  and SI modality exposed the lower physiological stress that traditional modality based on  $VO_2$ , respiratory exchange ratio, HR and rate of perceived exertion scale responses.

This study entitled "Exercise intensity at peak stroke volume versus VO2max and short versus long intervals may be more efficient to yield greater time spent at high stroke volume with less physiological stress" was presented in 14th National Sports Medicine Congress, December 12-14, 2013, Izmir, Turkiye.

Keywords: Aerobic Power, Maximal Oxygen Consumption, Nitrous-Oxide Rebreathing, Stroke Volume

### OP. 365 VO2PEAK AND VO2MAX DIFFERENCES MAY BE RELATED TO GAP IN PEAK STROKE VOLUME AND STROKE VOLUME AT VO2PEAK

Muzaffer Çolakoğlu <sup>1</sup>, <u>Özgür Özkaya</u> <sup>1</sup>, Görkem Aybars Balcı <sup>1</sup>, Bülent Yapıcıoğlu <sup>1</sup> <sup>1</sup> Ege University School of Physical Education and Sports

#### **Abstract**

**Introduction:** There are several studies focused on maximal  $O_2$  uptake  $(VO_{2max})$  measured by a verification phase (VP), following the determination of peak  $O_2$  uptake  $(VO_{2peak})$  by a graded exercise test (GXT), however there is no evidence to explain underlying mechanisms of the difference between  $VO_{2peak}$  and confirmed  $VO_{2max}$ . The purpose of this study was to show the percent difference between  $VO_{2peak}$  and  $VO_{2max}$  ( $\Delta VO_{2GXT-VP}$ ) and the gap in peak stroke volume ( $SV_{peak}$ ) and SV corresponding to  $VO_{2peak}$  ( $\Delta SV$ ) may related.

**Method:** Nine moderate to well-trained male athletes competing at a regional level specialists of cyclist, track and field volunteered to take part in the study (age:  $23.6\pm4.1$  years; body mass:  $75.8\pm4.7$  kg; height:  $181\pm6.7$  cm; body fat ratio:  $13.6\%\pm1.6\%$ ;  $VO_{2max}$ :  $60.2\pm7$  mL·min<sup>-1</sup>·kg<sup>-1</sup>). Following familiarization session, volunteers were asked to perform submaximal and maximal GXT. Then, constant-loading  $SV_{peak}$  test (using wattages in a range from 40-100% of  $VO_{2peak}$ ) and VP (using wattages corresponding with 100-110% of  $VO_{2peak}$ ) were conducted in a climatic chamber. Results were evaluated paired samples t-test and Pearson r correlation.

**Results:** The main results showed that  $\Delta VO_{2GXT-VP}$  was well correlated with  $\Delta SV$  (Pearson r=0.89; p≤0.001).  $VO_2$  level obtained from VP compare to GXT was %11.2 greater (60.2±7 vs. 54.2±8.1

 $mL \cdot min^{-1} \cdot kg^{-1}$ ; p=0.002). Heart rate and rating of Perceived exertion levels were not statistically different (p>0.05) while there were greater respiratory exchange ratio (p=0.022) and shorter test duration (p=0.000) in VPs.

Conclusion: Present study is showed that VPs performed by using a proper workload with suitable resting time seems useful to elicit true  $VO_{2max}$ . In addition, it is also presented that the gap between  $VO_{2peak}$  obtained from GXT and  $VO_{2max}$  determined by VPs is closely related to the difference between SV at  $VO_{2peak}$  and  $SV_{peak}$ . In that sense, it seems that decrease in  $\Delta SV$  is associated with GXT's result to increase the accuracy of  $VO_{2max}$  estimation.

This study entitled "VO2peak and VO2max differences may be related to gap in peak stroke volume and stroke volume at VO2peak" was awarded as the best oral presentation in 14th National Sports Medicine Congress, December 12-14, 2013, Izmir, Turkiye.

Keywords: Maximal Oxygen Uptake, Nitrous-Oxide Rebreathing, Stroke Volume, Verification

### OP. 391 EFFECT OF ACUTE RESISTANCE EXERCISE ON APPETITE IN HEALTHY MEN

Seda Öner <sup>1</sup>, Şerife Özen <sup>1</sup>, Burçin Ölçücü <sup>2</sup>, Gül Tiryaki Sönmez<sup>3</sup>

- <sup>1</sup> Abant İzzet Baysal University School of Physical Education and Sports Coaching Education Department
- <sup>2</sup> Gaziosmanpaşa University School of Physical Education and Sports Coaching Education Department
- <sup>3</sup> The City University of New York Lehman College Department of Health Sciences Bronx

#### **Abstract**

**Aim:** This study investigated the effects of acute resistance exercise on appetite markers ratings.

Methods: Ten healthy male subjects participated voluntarily in the study and written informed consent was obtained from all subjects before participation. Subjects were excluded from participation in the study if they had a history of a chronic disease (e.g. cancer, heart disease, diabetes), uncontrolled hypertension or taking blood pressure medication, any condition that would alter one's metabolism (e.g. thyroid disease) or ability to exercise (e.g. orthopedic limitations), diagnosed psychological disorders (e.g. depression), recent weight loss of greater than 5 kg. or low levels of sleep (<6 h/night). The study was approved by the ethical board of the Abant İzzet Baysal University School of Medicine Clinical Laboratory Research, Bolu, TURKEY and it was performed in accordance with the principles of the Declaration of Helsinki. Subjects undertook two, 1,5 h trials (exercise and control) in a randomized crossover design. Before the trials, the 10 repetition maximum (10RM) was determined for all resistance exercises. In the exercise trials subjects were performed three sets of 10 repetitions for each exercise (leg press, leg curl, chest press, lat pull down, shoulder press, biceps curl, sit-up) at 80% of 10RM and a 60-second rest interval between exercises and a 2-minute rest interval between sets were provided. In the control trial, subjects rested for 1,5 h. Ratings of subjective feelings of appetite markers in response to rest and exercise forms were investigated using a randomized crossover design. Ratings of subjective feelings of appetite markers were reported on 100 mm visual analogue scales (VAS) at baseline (-20) and at 0, 20, 40, 60 and 90 mins after baseline. Visual analogue scales (VAS) were used to measure the following appetite markers: (i) Hunger, (ii) Fullness, (iii) Desire to Eat and (iv) Prospective Food Consumption. Specifically, participants were asked to provide subjective ratings of their current state for the following appetite markers: (i) Hunger - 'How hungry do you feel at this moment?' (ii) Fullness - 'How full does your stomach feel at this moment?' (iii) Desire to Eat - 'How strong is your desire to eat at this moment?' and (iv) Prospective Food Consumption – 'How much food do you think you could eat at this moment?'

**Results:** Statistical analysis was carried out using SPSS version 17.0 (SPSS, Inc., Chicago, IL, USA). Paired sample t-test were used to assess differences between baseline values for each of these variables on the control and exercises trials. Repeated-measures, two factor ANOVA was used to examine differences between the two trials over time for hunger change. Between-trial differences at each time point were examined using one-way ANOVA and Bonferroni post hoc tests when significant interactions were found. Mauchley's test was conducted to examine sphericity for the repeated measures analyses. If the assumption of sphericity was violated, the Greenhouse-Geisser adjustment was used to protect against type I error. Statistical significance was accepted at the 5% level. Two-way ANOVAs revealed significant (P<0.05) trial effects (P<0.05) and time (P<0.05) effects in all appetite markers except desire to eat marker.

**Conclusions:** In conclusion, acute resistance exercise increases appetite in healthy men.

**Keywords: Exercise, Appetite, Weight Control** 

# OP. 416 INVESTIGATION OF SHOOTING HIT RATE AND SHOOTING SPEED IN 17 AGE GROUP HANDBALL PLAYERS

Abdurrahman Ersoy <sup>1</sup>, İpek Eroğlu Kolayiş<sup>2</sup>

#### **Abstract**

**Aim:** Aim of this research is to examine the relationship between shooting hit rate, shooting speed and grasp power in 17 age group handball players.

**Methodology:** 10 handball players interested in handball and training regularly from 17 aged group participated in this research voluntarily. Before measurements, a handball goalpost was drawn on the wall according to principle dimensions and put marks on each corners. Video cameras were used to specify the shooting hit rate of participants. All of the shots were recorded with the camera and then hit rates were identified for each player. Moreover, target tracking radar system was used to measure speed of shootings and these speed results were saved as kilometer. A Takkei dynamometer was used to specify grasp power of handball players in the research. The grasp power test was applied two times and calculated by taking average of the results. SPSS 15.0 for Windows packet, Mann Whitney U test and Spearman Correlation were used to analyze the data.

**Indications:** 10,20±3,61 successful shooting numbers, 9,80±3,61 unsuccessful shooting numbers, 45,01±3,78 kg right hand grasp power, 42,6,46 kg left hand grasp power were observed at the result of the analysis. At this research, average speed of successful shooting was determined as 60,26±5,25 km, average speed of unsuccessful shooting was determined as 60,08±4,39 km and there wasn't so much statistical differences between average speed of successful and unsuccessful shooting (p>0,05). At the result of the correlation analysis couldn't be found statistical important relationship between grasp power and successful and unsuccessful shooting speed and number (p>0,05). Furthermore, there was a meaningful relationship between successful and unsuccessful shooting number as inversely proportional. While the number of successful shooting was increasing, the number of unsuccessful shooting decreasing.

**Result:** As a result, it was observed that there wasn't important relationship between successful and unsuccessful shooting and speed of shooting of 17 aged group handball players. Also, it was determined that grasp power didn't affect the shooting hit rate importantly

Keywords: Handball, Shooting Speed, Hit Rate, Grasp Power

# OP. 422 INVESTIGATION THE EFFECTS OF ELASTIC BAND AND MEDICINE BALL EXERCISES ON STRENGTH DEVELOPMENT ON 12-14 AGES VOLLEYBALL PLAYERS

Beyza Sımsek<sup>1</sup>, Berk Çanakcı <sup>1</sup>

#### **Abstract**

**Aim:** This study examined the effects of elastic band and medicine ball exercise on strength development of 12-14 age group volleyball players.

**Method:** 24 competitive junior volleyball players divided into training group (age:  $13,16 \pm 0,71$ , tarining age:  $2,66 \pm 0,88$ , height:  $1,64 \pm 0,07$ , weight:  $52,83 \pm 7,82$ , BMI:  $19,40 \pm 2,13$  and %fat:  $22,36 \pm 7,63$ ) and control group (age:  $13 \pm 0,73$ , training age:  $3,03 \pm 0,90$ , height:  $1,64 \pm 0,06$ , weight:  $54,01 \pm 4,79$ , BMI:  $19,93 \pm 1,78$ , % fat:  $23,00 \pm 4,00$ ). Training group divided into two as elastic band group (n=6) and medicine ball group (n=6). Athletes who participated to study, do regular training 6 times a week.

**Results:** Training group divided into medicine ball group and elastic band group. Medicine ball group performed medicine ball exercises and elastic band group performed elastic band exercises 30 min a

<sup>&</sup>lt;sup>1</sup> Sakarya University Institute of Education Sciences

<sup>&</sup>lt;sup>2</sup> Sakarya University School of Physical Education and Sports Department of Recreation

<sup>&</sup>lt;sup>1</sup> Kırıkkale University School of Physical Education and Sports

day and 3 days a week during 6 weeks. Control group, just continued their tecnical trainings. Before and after the training programs height, weight, % fat, vertical jumping, arm strength and medicine ball throwing tests were applied. All vertical jumping results of athletes significantly increased in training group. In the arm strength parameter, just strength 1 (elbow 40°-60°; shoulder 0°) and strength 4 (elbow 130°-160°; shoulder 130°-160°) increased in all groups. On the other hand, in all medicine ball throwing results increased significantly except for standing both arm medicine ball throwing.

**Conclusion**: it was identified that medicine ball and elastic band exercises performed by 12-14 age group volleyball players effects strength development positively.

Keywords: Strength, Elastic Band, Medicine Ball, Volleyball

### OP. 426 DECREASED INTERLIMB DIFFERENCES IN FEMALE BASKETBALL PLAYERS

Selcuk Akpınar<sup>1</sup>

<sup>1</sup> Nevsehir Haci Bektas Veli University Faculty of Education

#### **Abstract**

Objectives: While on gross inspection, the human body appears anatomically symmetric; asymmetry is a basic organizing principle of the human nervous system. Anatomical asymmetries in the hands, feet, eyes and ears are generally small. However, functional asymmetries in the nervous system can result in substantial behavioral asymmetries. Many studies have shown that physical exercise and sports specific training can positively influence neurophysiological characteristics of the brain. This can modify the sensorimotor performance of both arms during the reaching movements, which may result with the decreased interlimb difference. Thus, the purpose of this study was to investigate if female basketball players have decreased interlimb difference compared to aged match non-athletes.

Methods: The preliminary data was collected with 5 right-handed female basketball players (Mage= 222.4) and aged match non-athletes (212.8). The subjects were seated at the table with sensors of the electromagnetic movement tracker (TrackSTAR, Ascension Technology, USA) attached to their right and left forearm and upper arms. This setup assured reaching in the 2D horizontal space in front of the subject. Subjects' arms were covered by a mirror onto which two cursors, start positions and targets were projected from 55" flat screen TV, which displayed a custom virtual reality interface. These cursors were associated with the index finger of each arm and their position on the screen was updated in real time, limited to TV screen update of 50 Hz. Data of finger displacements were recorded at 100 Hz frequency during subjects' movements. The subjects were asked to reach one of the three targets with three different directions (30, 60, and 90). To prevent the interlimb transfer, subjects were asked to reach the targets with one arm in a session and they were asked to come the lab again to test the other arm in the other session. Each experiment session consisted of 90 trails with pseudorandomized order. The collected data were analyzed using Matlab software and, accuracy and linearity of the each reaching movement were calculated. Three-way analysis of ANOVA (target directions, 30, 60, and 90 x group, basketball players and non-athletes x arms) was used to investigate if basketball players have less interlimb difference at one of three different targets compared to non-athletes.

Results: Results displayed significant interactions for both accuracy and linearity measurements. Post-hoc analyses displayed that left arm of basketball players had better accuracy and linearity compared to same arm of the non-athletes. Whereas there was not significant difference between the left and right arm of basketball players for both measurements, right arm of non-athletes displayed significantly better accuracy and linearity compared to left arm of the same group.

Conclusions: Previous research by Stockel and Weigelt (2012) showed that professional basketball players have more accurate performance in some basketball skills with their left non-dominant arm compared to amateur players. However, they have analyzed the videos of the games and counted the corrected passes and shoots among players. Thus, they could not measure any sensorimotor performance, like accuracy or linearity of the reaching movements. In this study, those measurements were taken under laboratory situation and more quantitative data were gathered. The results displayed better motor performances in favor of basketball players. Moreover, as there was not significant

difference between the arms in basketball players, they showed no interlimb difference compared to non-athletes, which could be the possible result of the bilateral training in basketball. Thus, sports like basketball in which both arms should be used for dribbling, passing, and shooting can modify the human laterality mostly affecting the brain control mechanism and thus decreasing the asymmetry between arms.

Keywords: Interlimb Difference, Asymmetry, Basketball, Motor Performance

# OP. 437 INVESTIGATION OF H REFLEX AND RECURRENT INHIBITION AT THE FLEXOR CARPI RADIALIS MUSCLE IN HEALTHY SUBJECTS

Gözde Koç<sup>1</sup>, K.Alparslan Erman <sup>1</sup>, Hilmi Uysal <sup>2</sup>

#### **Abstract**

PURPOSE:Neuromuscular system requires many complex regulation and network in terms of movement control. Interneurons are responsible for %99 of all motor neurons during the regulating. Some interneurons have excited characterized properties, while others have inhibitory properties. Therefore the purpose of this study was to examine the effectiveness of two spinal mechanisms which were obtained with different stimulations protocols in healthy subjects.

METHODS: Four healthy subjects who used the right hands in their daily life , (2 male, 2 female) participated in this study (body mass 65±21.95kg, height 172.5±16.05cm, age 27.25±3.40yr, means\_SD). While H reflex protocol was used to determine motor neuron excitability in the study, Recurrent inhibition protocol was used to determine the inhibition which occurred in spinal segment. All conditions were obtained from flexor carpi radialis muscles with Neuropack M1 Nihon Kohden EMG device. The largest H reflex (H<sub>max</sub>) was recorded which occurred with evoke submaximal response and in which M response was not observed. Motor neuron excitability was evaluated with H/M<sub>max</sub>. Recurrent inhibition protocol was applied by giving two consecutive stimulations. The period between stimulus were determine 3 sec. and the value of having the largest amplitude which was obtained successively five H' response was used. Recurrent inhibition protocol applied to three stimulation intensity protocol (S1M1). 1<sup>st</sup> protocol S1; H<sub>max</sub> intensity, 2<sup>nd</sup> protocol S1; %10 of

M<sub>max</sub>, 3<sup>rd</sup> protocol S1; %30 of M<sub>max</sub>. Both condition protocols were applied in both forearms.

RESULTS: As a result, There was statistically significant difference in recurrent inhibition which applied between %10 and %30 intensity of  $M_{max}$  in right arm (p<0.05). It was determined that the reason of this significant difference occurred because of the decrease in H' response which was occurred by  $M_{max}$  of %30 stimulation intensity. There was no statistically significant difference in H' response obtained by two different stimulation intensity in left arm. There was no significantly difference between the values of the right and left arm in  $H/M_{max}$  parameters.

DİSCUSSİON:According to results; when the stimulus intensity increased from %10 to %30, recurrent inhibition increased. It could be said that excitability of alpha motor neuron obtained from right and left FCR muscles could be the same.

Keywords: Recurrent Inhibition, H Reflex, Flexor Carpi Radialis

<sup>&</sup>lt;sup>1</sup> Akdeniz University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Akdeniz University Faculty of Medicine Department of Neurology

# OP. 439 DO KNEE MUSCULAR ACTIVATIONS CHANGE ACCORDING TO DIFFERENT SOCCER KICK TECHNIQUES?

Ali Onur Cerrah<sup>1</sup>, Abdullah Ruhi Soylu <sup>2</sup>, Adrian Lees <sup>3</sup>, Hayri Ertan <sup>1</sup>

<sup>1</sup> Anadolu University Faculty of Sport Sciences

#### **Abstract**

Aim: The aim of the study was to define activation characteristics of muscles around the kicking leg knee and the velocity of ball during the different kicking techniques and the correlation between two parameters.

Method: Muscular activation of selected knee extensors (RF, VL, VM) and flexors (BF, GAS) of 10 amateur soccer players were measured during the inside, lofted, inside curve, in-step, outside, outside curve kick. Inside kick was performed with one step and rests of the kicks were performed with two steps to a stationary ball towards a target (width 3.00 m, height 2.44 m) 15 m away with a full size (number 5) soccer ball. Participants were asked to kick the ball with maximal velocity so as to strike a target and accurate 3 kicks were analysed. Ball velocity was measured by a radar gun. Mean scores were calculated for each participant's three kicks from each types of kick and averaged across each group. All data were normally distributed (Kolmogorov-Smirnoff). To identfy correlation between ball velocities and EMG activities of muscles Perason Coreelation was used.

Results: The highest ball velocity achieved in the instep, lofted, inside curve, outside, outside curve and inside kick respectively. During the leg cocking and forward swing phase, the higher VM and VL activations occurred in the lofted, instep and outside kick. At impact, muscle activity in the knee extensors remained high during impact itself especially in the instep, outside and outside curve kick. During the follow through, GAS activation increases in the outside and outside curve kick. According to result of correlations between ball velocities of six different kicks and mean EMG activities of mucles, the significant positive correlations occurred in VM, large positive correlations in VL as well as negative correlations in BF and GAS. There was an increase in knee extensor activity and a reduction in knee flexor activity over the critical phase (toe-off to impact) for better kicks. This is particularly evident in faster kicks instep, inside curve and lofted kick. The inside kick follows the same trend but there is less empahasis placed on VL. This is starting to suggest that kick type is influenced by muscle co-ordination activity because the leg is turned outwards to make the inside kick. The reduction of muscle activity in VL might explain why the inside kick is less fast. The outside kicks are the most different because these have reduced speed but also are technically difficult. It seems that players are reducing VM (the oposite of the inside kick with VL) but also needing to use BF and GAS. GAS is particularly high (a positive correlation) suggesting that there is a lot of foot/leg reorientation and involvement and GAS is particularly influential. Given that GAS is a 2 joint muscle it would seem reasonable for there to be some influence on BF which changes from a clear negative correlation to a zero correlation. Finally it's worth noting the role of RF, which is generally low negative correlation. This suggests that it is not a prime mover in either the strength of the kick or influences the technical changes required for the more complex kicks. As it is a 2 joint muscle it could be contributing by allowing the upper leg to decelerate so that enegry is transferred from the thigh to the shank which is what is required in a well executed kick.

Conclusion: The results of this study demonstrate that kicking velocity changes according to kicking techniques. These resultant ball velocities could have occurred because of coordination differences of knee joint muscles. Therefore the different kicking techniques training should be organized with respect to muscle contribution during type of kick.

Keywords: Electromyography, Kicking Leg, Different Techniques, Ball Speed, Soccer

<sup>&</sup>lt;sup>2</sup> Hacettepe University Faculty of Medicine

<sup>&</sup>lt;sup>3</sup> Liverpol John Moores University Sport and Exercise Sciences

# OP. 452 EFFECTS OF 8 WEEKS SLIDE BOARD EXERCISES ON 100M FREE STYLE SWIMMING PERFORMANCES OF 14-16 AGED GROUP SWIMMERS

<u>Taha Çeteoğlu</u><sup>1</sup>, Bergün Meriç Bıngül <sup>1</sup>, Menşure Aydın <sup>1</sup>, Çiğdem Bulgan <sup>2</sup>

#### **Abstract**

**Aim:** The aim of this study was to investigation of the effects of eight weeks slide board exercises on 100 meters free style swimming performance on 14-16 aged group male swimmers.

Method: Twenty male swimmers as ten of them were control group (mean age 14,90±0,87 years, mean training experience 4,90±0,73 years, mean height172,60±8,52 cm; mean body mass 66,20±8,22 kg); and ten of them were experimental group (mean age 14,85±0,65 years; mean training experience 4,98±0,62 years; mean height 173,51±4,75 cm; mean body mass 67,40±6,54kg) were participated to this study. Experimental group was applied slide board exercises, three days a week and half an hour per day during eight weeks. Before and after the exercises, swimmers' 100 meters free style swimming performances were recorded in Kocaeli Swimming Club, Kocaeli, Turkey. During eight weeks control group were applied their routine trainings in the pool and experimental group were added slide board exercises to their routine trainings. SPSS version 21.0 for windows (SPSS, Chicago, IL) was used for statistical analyses. Wilcoxon test used for comparison of the pre test and post test results of 100 meters performances and also Mann Whitney U test performed for determination of the differences between two groups.

**Results:** In results, there was no statistically significant differences found in the first measurement of 100m performances between the experimental and control groups (p>0,005). After the experimental group performed eight weeks slide board training program, 100m freestyle swimming results were calculated significantly lower compared to the results of the first measurement. Also it was found significant differences between two groups (p<0,005).

**Conclusion:** As a conclusion, when applied to slide board exercises was to provide a positive contribution to the performance of swimmers. Slide board exercises can be used in large population with training specific to each sport branch and it is recommended that to periodically used in the preparation season of athletes.

Keywords: Swimming, Performance, Slide Board

# OP. 454 IS WALK TO RUN TRANSITION SPEED DIFFERENT FOR ATHLETES AND SEDENTARY INDIVIDUALS?

Ayhan Taner Erdoğan<sup>1</sup>, Uğur Dal <sup>2</sup>, Hüseyin Beydağı <sup>2</sup>

### **Abstract**

PURPOSE: Theoretical and experimental investigation of walk to run transition (WRT) mechanism as walking speed increases has always been a point of interest of researchers. In many studies, Walk to Run Transition Speed (WRTS) was investigated in terms of anthropometric, kinetic, mechanic, kinematic, perceptive and energy consumption. While average WRTS is 6,48-7,92 km/hr, average preferred walking speed is 4,80 km/hr for human beings which means that a gait cycle duration is more than 1 second. As speed increases, double support phase become shorter and finally disappear and running action starts subsequently. It is thought that WRT occurs to decrease metabolic energy cost in individuals. WRTS takes place to avoid hyperextension of dorsiflexors during swing phase. In the case of increment in walking speed, ankle flexors become extended which stimulates running transition. Besides, flexor muscles actively involved in the swing phase of the gait affects WRTS. The

<sup>&</sup>lt;sup>1</sup> Kocaeli University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Halic University School of Physical Education and Sports

<sup>&</sup>lt;sup>1</sup> Mersin University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Mersin University Faculty of Medicine Department of Physiology

decrement in ankle extensor muscle strength makes gait less cost effective. Since it might be thought that above mentioned specifications of athletes and sedentary individuals could be different, the aim of our study was to investigate if WRTS may differ between athletes and sedentary individuals.

METHOD: Twenty-six athletes (age:22,23±2,30 years, height:176,35±5,67 cm, body mass:72,77±7,34 kg, %body fat:10,45±4,35) whose weekly sport duration was 14.92±6.06 hours and 26 sedentary (weekly sport duration:1,50±2,35 hour, age:22,46±2,92 years, height:175,57±6,17 cm, body mass:71,59±11,16 kg, %body fat:14,17±4,70) total of 52 individuals ages ranged 18-30 years were participated in the present study. A stepped protocol was used to determine the WRTS. Individuals were asked to start walking on the treadmill at the speed of 2.2km/hr, in such a way that they cannot see the treadmill screen. Treadmill speed was increased systematically 0,4 km/hr every 30 seconds until individuals reported that they reached their preferred running speed. In the case that individuals kept running 30 second at the transition speed, it was recorded as WRTS.

RESULTS: There was no significant difference in WRTS between athletes  $(7,61\pm1,05\,\text{km/hr})$  and sedentary individuals  $(7,53\pm0,82\,\text{km/hr})$ . Low speed transition was expected for sedentary individuals whose rate of perceived exertion (RPE) values (ahtletes:  $8,15\pm1,97$  and sedentary:  $10,12\pm2,17$ , p<0,05), were significantly higher than their counterparts to keep their energy expenditure at optimum level. Yet, this difference didn't reflect to WRTS.

CONCLUSION: In conclusion, it can be speculated that the reason that there was not any significant difference in WRTS could be that of the local and muscle specific factors were effective in WRTS.

Keywords: Sedentary, Athletes, Walk To Run Transition

### OP. 459 SKI AND ELITE ATHLETE COMPARISON OF BONE MINERAL DENSITY

Recep Soslu<sup>1</sup>, Mehmet Göktepe<sup>1</sup>, Murat Taş<sup>2</sup>, Öznur Akyüz<sup>3</sup>, Dursun Katkat<sup>4</sup>

### **Abstract**

**AİM:** Bone mainly supporting body, weight bearing, which protects the vital organs, muscle is a tissue of the adhesion-providing movement. This task due to gravity and other warnings from the outside with consistently carries a mechanical load. Physical activity, an increase in bone mass is a factor. Based on this elite level sport athlete and skier was conducted to compare the bone mineral density.

**Methods:** Standard DEXA at the lumbar spine and proximal femur study describes the measurement. Proximal femur, in evaluating femoral neck, trokand and Ward's triangle area of bone mineral density by DEXA (dual energy X-ray absorptiometry) method, respectively, osteoporosis (T-score <-2.5) and osteopenia (T-score between -1 and -2.5 peer) 13 A total of 26 people, including athletes and 13 skiers were applied. Athletes blood parameters (sodium, calcium, potassium) was determined in routine biochemistry.

**Results:** The results of analysis of bone mineral density levels of skiers compared to athletes p < 0.05 was determined to be significant. In addition, the potassium level skiers were found to be significantly reduced in athletes. Among groups a significant difference in the levels of calcium and phosphorus were determined.

**Conclusions:** Elite athletes and intense experience for exercising, training frequency and the different results depending on the type of sports activity is reported. As a result of skiers in the study of bone mineral density be higher as compared to athletes and therefore with increasing physical activity that may cause bone and muscle stress of intense exercise program can be said to differ from each other should be considered.

Keywords: Bone, Exercise, Dexa, Bone Mineral Content, Bone Mineral Density

<sup>&</sup>lt;sup>1</sup> Ağrı İbrahim Çeçen University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Celal Bayar University School of Physical Education and Sports

<sup>&</sup>lt;sup>3</sup>Atatürk University School of Physical Education and Sports

<sup>&</sup>lt;sup>4</sup> Mersin University School of Physical Education and Sports

### OP. 461 ELITE LEVEL LEVEL COMPARISON OF HEAVY METAL IN SKI AND ATHLETES

Recep Soslu<sup>1</sup>, Mehmet Göktepe <sup>1</sup>, Murat Taş <sup>1</sup>, Murat Akyüz <sup>2</sup>, Öznur Akyüz <sup>3</sup>, Aziz Güçlüöver <sup>4</sup>

- <sup>1</sup> Ağrı İbrahim Çeçen University School of Physical Education and Sports
- <sup>2</sup> Bartın University School of Physical Education and Sports
- <sup>3</sup> Atatürk University School of Physical Education and Sports
- <sup>4</sup> Kırıkkale University School of Physical Education and Sports

#### Abstract

**Objective:** For centuries, technological developments, diseases resulting changes in the characters and the information obtained in the areas of science, medicine and other chemical and physical factors of many diseases nowadays the concrete has identified a clear relationship. Studies, heavy metals, mental and neurological function, neurotransmitter production and use of hormonal activity by affecting the various revealed that directly affect human physiology. Toxic metals affect the operation of the system, the blood and circulatory system, detoxification systems (intestines, liver, kidneys, skin) hormonal systems, power generation systems, enzymes, gastro-intestinal, immune, nervous and extraction system, the discharge system. Based on this elite level sport athlete and skier was planned to compare the heavy metal levels.

**Methods:** The study; Eight control, eight athletes and a total of 24 people attended, including eight skiers. Ski and athletes' height (cm)  $175.55 \pm 1.08$ , weight (kg)  $69.13 \pm 1.64$  and the national team level athletes trained for at least five years actively created. Subjects are placed in 10 cc of blood EDTA tubes centrifuged at 3000 rpm for 15 min and plasma was separated. Serum samples were analyzed in DME-80 devices.

**Results:** The obtained results, in skiers and athletes than in control group aluminum and antimony parameters compared to control group, p < .001 level, meaning that results when determining the lead in the statistically significant result was found.

**Conclusion:** In the study of heavy metal levels of skiers and athletes, appear to be higher than the control group in which it will occur in the training will increase oxidative stress and may negatively affect the performances, said. Also oksitadif occurring antioxidant levels to suppress the increase of stress, performance can be found in the suggested positive effects.

Keywords: Heavy Metal, Exercise, Antimony, Aluminum, Lead

### OP. 517 THE EFFECTS OF EXERCISE-INDUCED MUSCLE DAMAGE ON BALANCE

Tuğba Kocaağa<sup>1</sup>, Ümid Karlı <sup>1</sup>

#### Abstract

**Introduction and Purpose:** Exercise-induced muscle damage which can be also expressed by micro injury, micro trauma or muscle damage, is defined as a temporary cellular damage that occurs in the skeletal muscles after high intensity exercises. Power reduction, muscle soreness, limited joint mobility and inflammation are common indicators of muscle damage following high intensity eccentric exercises. Also there are number of studies investigated the negative effects of muscle damage on athletic performance parameters such as strength, endurance, sprint and agility. However the effects of exercise-induced muscle damage on balance performance is not clear in the literature. Therefore the purpose of this study was to investigate the effects of exercise-induced muscle damage on balance performance.

Materials and Methods: Eleven healthy male subjects (age:  $22,00 \pm 2,60$  years; height:  $173,12 \pm 100$ 

<sup>&</sup>lt;sup>1</sup> Abant İzzet Baysal University School of Physical Education and Sports

9,54cm; body mass:  $65,85 \pm 9,57$ kg; body fat percentage:  $11,65 \pm 4,14\%$ ) who did not sustain high intensity eccentric exercises at least one month and did not do any physical activity at the week before the beginning of the study have volunteered to participate to this study. Randomized cross-over experimental design was used in the study. Five sets of 20 repetitions drop jumps were performed as a muscle damaging exercise protocol. Muscle soreness level, creatine kinase (CK) activity level, midthigh girth scores, single leg and squat position balance performances on Biodex Balance System were determined before (baseline), immediately after, at 24th, 48th, 72nd and 96th hours following the muscle damaging exercise protocol. One way and two way ANOVA for repeated measures were used for statistical analysis.

**Results:** According to variance analysis for repeated measures, there were significant main effect for time  $(F_{(5-50)}=11,200; p=0,000)$  with respect to creatine kinase; significant main effect for time  $(F_{(5-100)}=38,441; p=0,000)$ , time x trial  $(F_{(5-100)}=33,710; p=0,000)$  and trial  $(F_{(1-20)}=62,272; P=0,000)$  with respect to perceived muscle soreness; significant main effect for time  $(F_{(5-100)}=3,255; p=0,009)$  and time x trial  $(F_{(5-100)}=4,526; p=0,001)$  with respect to mid-thigh girth. Also there were significant main effect for time regarding to squat position static balance overall  $(F_{(5-100)}=2,959; p=0,016)$  and anterior-posterior  $(F_{(5-100)}=3,030; P=0,014)$  scores. No significant changes were indicated in squat position static balance medial-lateral index, squat position dynamic platform balance and single leg balance index (p>0,05).

**Conclusion:** The increase in the CK activity level, muscle soreness level and mid-thigh girth values compared to baseline are the proof of the successfulness of the drop jump exercise protocol which was conducted to cause muscle damage in the lower body extremity. Although the existence of muscle damage on lower extremity, single leg balance performance was not affected. Yet, the balance in squat position which is used for determining muscle soreness level was seen partly-affected by the exercise-induced muscle damage.

Keywords: Creatine Kinase, Drop Jump, Muscle Soreness, Balance

## OP. 535 EFFECT OF YO-YO TEST-INDUCED FATIGUE ON BIOMECHANICS OF INSTEP KICKING IN SOCCER

Erbil Harbili<sup>1</sup>, Asım Tuncel<sup>2</sup>, Serdar Arıtan<sup>3</sup>

- <sup>1</sup> Selçuk University School of Physical Education and Sports
- <sup>2</sup> Selçuk University Institute of Health Sciences
- <sup>3</sup> Hacettepe University Faculty of Sport Sciences

### **Abstract**

**Purpose:** The purpose of the study was to examine effect of Yo-Yo test-induced fatigue on the stiffness of the ankle joint during the instep kicking in soccer. In direction of this purpose, the changes of the linear and angular kinematics of the ankle joint were investigated between the beginning and the end of the contact of the foot with ball during soccer instep kicking in the rest and fatigue conditions. Methods: Ten soccer players (age: 19.00±0.82 years, height: 1.79±0.05 m, body mass: 75.0±7.54 kg, training age: 10.3±1.89 years) participated in the study from professional soccer club. The instep kicks of the soccer players were recorded using one high speed camera to be recorded 6000 frames per second (Photron SA3, Japan) after 15-min warm-up. The soccer players performed the Yo-Yo intermittent recovery test level 1 (Yo-Yo IR1) as double. The blood lactate concentration was determined using the Lactate Plus portable analyzer (Lactate Plus, Nova Biomedical, REF 41293B, USA) from blood samples taken from fingertip at rest and the end of Yo-Yo IR1. After occurrence of fatigue, soccer players did instep kicks that were recorded again. 5th metatarsal joint, lateral malleolus, the lateral epicondyle, and the center of the ball were digitized using custom software that was developed for this study. The differences between the biomechanical and physiological parameters after and before the fatigue, and the differences between biomechanical parameters in the beginning and the end of the contact of the foot with ball were analyzed using dependent t test.

**Results:** The heart rate and blood lactate level after Yo-Yo test increased significantly with respect to the rest condition (p<0.05). On the other hand, Yo-Yo test-induced fatigue did not show in any changes on biomechanics of the instep kicking (the horizontal velocity of the knee, ankle, foot fingertip, and the ball, the angle of the foot segment in the beginning of the contact of the foot with the ball, the angular displacement of the ankle joint, and the time of the contact of the foot with the ball) in soccer (p>0.05). However, in the rest condition, the horizontal velocities of the knee, ankle, and foot fingertip in the end of the contact of the foot with the ball were significantly lower than in the beginning of the contact of the foot with ball (p<0.05). In the fatigue, the horizontal velocity of the ankle joint and foot fingertip in the end of the contact of the foot with ball was significantly lower than in the beginning of the contact of the foot with ball (p<0.05), except for the horizontal of the knee (p>0.05). The joint angle of the ankle decreased significantly in the instep kicks performed in conditions both the rest and fatigue (p<0.05), however, the angle of the foot segment being with the horizontal increased in the end of the contact with the ball with regard to the beginning of the contact with the ball (p<0.05).

**Conclusion:** Yo-Yo test-induced fatigue did not affect the stiffness of the ankle joint during the instep kicking in soccer. However, significant changes were observed in the kinematics of the ankle during the instep kicks performed in the rest and fatigue conditions.

Keywords: Football, Instep Kicking, Ankle Joint, Kinematical Analysis

### OP. 536 THE EFFECT OF ACUTE STATIC STRETCHING ON CONCENTRIC AND ISOMETRIC KNEE STRENGTH

Zübeyde Aslankeser <sup>1</sup>, Serkan Revan <sup>1</sup>, Abdurrahim Kaplan <sup>1</sup>

#### **Abstract**

Aim: The aim of this study was to explore the effects of static stretching on quadriceps and hamstring muscles

**Method**: 13 men(22,3 $\pm$ 4,2 years) and 10 women (21,6 $\pm$ 5,6 years)participated the study voluntary. The subjects performed warm -up 50 W-60 rpm-5 minutes on a cycle ergometer. The Cybex Norm isokinetic dinamometer was used for strength measures  $210^{0}$ /s,  $60^{0}$ /s and isometric module. After control measures, non assistive static stretching was applied to quadriceps and hamstring muscles(30 seconds stretching -20 seconds recovery and 3 set).

**Results**: The results were analyzed with paired t test. After the stretching, all strength values decreased significantly (p<0,005).

**Conclusion**: Our findings suggest that static stretching decrease the muscle force and it must be consider pre competition especially up on the strength sport activity.

**Keywords: Stretch, Force, Isokinetic** 

### OP. 538 RECOVERY AFTER REPEATED SPRINT ABILITY: COMPARISON OF TRAINED AND UNTRAINED INDIVIDUALS

### Sultan Harbili<sup>1</sup>

### **Abstract**

**Purpose:** The purpose of the study was to investigate effects of training both in repeated sprint ability (RSA) and during the recovery after sprint.

**Methods:** Soccer players playing in regional amateur league (n=14, age: 21.86±2.35 years, height: 180.14±4.54 cm, body mass: 72.57±5.03 kg, training age: 8.71±1.86 years) and non-athletes recreation students (n=13, age: 23.77±2.65 years, height: 178.54±4.67 cm, body mass: 74.54±10.52 kg)

<sup>&</sup>lt;sup>1</sup> Selçuk University School of Physical Education and Sports

<sup>&</sup>lt;sup>1</sup> Selçuk University School of Physical Education and Sports

participated in this study as trained and untrained group, respectively. The groups was tested using Yo-Yo intermittent recovery test level 1 (Yo-Yo IR1) and maximum oxygen uptake ( $VO_{2max}$ ) was calculated from running distance using a formula. Groups performed an RSA (6 x[6 s of Wingate test protocol + 30 s of rest]) after 48 h. Groups did not perform any training and exercise during 48 h recovery. Blood lactate level (Lactate Plus, Nova Biomedical, REF 41293B, USA) and heart rate (S610i, Polar Electro Oy, Kempele, Finland) of groups were recorded at rest, immediately, 5, 15, and 30 min after RSA testing. The power result of repeated sprint ability test (peak, mean and minimum power output), blood lactate level and heart rate was compared using two-way repeated measures ANOVA (groupxtime). When significant results were found the differences between trained and untrained group was analysed with independent t test. The within-subject changes of the power values was analysed using one-way repeated measures ANOVA. When significant difference was found Bonferroni correction was used as post-hoc test. P value was set at 0.05.

**Results:** The absolute values of  $VO_{2max}$  calculated from running distance in Yo-Yo test were significantly higher in trained group than that of untrained group (p<0.05). The values of absolute and relative peak and minimum power were significantly higher in trained group than that of untrained group in all repeated sprints (p<0.05). The absolute values of mean power was significantly higher in trained group than that of untrained group except for first sprint (p<0.05), and the relative values of mean power was significantly higher in trained group than that of untrained group in all sprints (p<0.05). In addition, it was observed that peak power values decreased in both groups during repeated sprint, and maintained in trained group during the 3rd-4th sprint (p<0.05). Mean and minimum power values decreased in all sprints in untrained group, when mean and minimum power values decreased only in 4th, 5th and 6th sprints in trained (p<0.05). On the other hand, it was observed that blood lactate level at 30 min and heart rate at 15 and 30 min of the recovery after testing was significantly lower in trained group than that of untrained group (p<0.05).

**Conclusion:** The performence and metabolic results showed that the endurance performance played a decisive role both in maintained in short-time repeated sprint ability and acceleration of the recovery period.

Keywords: Lactate, Heart Rate, Wingate Test

### OP. 540 EFFECT OF HIGH INTENSITY INTERVAL TRAINING ON BODY COMPOSITION AND AGILITY PERFORMANCE OF OVERWEIGHT WOMEN

Abdorreza Eghbal Moghanlou <sup>1</sup>, <u>Seyed Javad Mirghani</u><sup>2</sup>, Mehdi Said Yousefi <sup>3</sup>

### **Abstract**

*Background:* High intensity interval training (HIIT) is one of the approaches to improve indices of body composition. It is clear that the body fat percent and fat mass are physiological factors that influence agility score. This study was designed to examine the effect of HIIT on body composition and agility performance of overweight women.

**Material And methods:** Twenty four volunteer women with mean aged 34.42±5.3 years old with BMI 29.48±3.45 Kgm2, weight of 80±0.08, height of 159.14±4.60 cm, respectively were randomly assigned into three equal groups (n=8) of 60/60 activity-rest, 60/30 activity-rest and control. The exercise protocol included 4 weeks of 4 trials, three sessions per week at 80% reserved heart rate increased to 10 trials in the fourth week.

Results: Four weeks of HIIT sessions did not result in significant change in blood lipid profiles (p<0.05). There was a significant difference in the percent of fat in the three group and the difference was between the 60/30 activity-rest condition compared to the control group (p<0.05). in addition, no significant difference in the level of waist to hip ratio(p=0.134), weight (p=0.238), BMI (p=0.564),

<sup>&</sup>lt;sup>1</sup> Ataturk University Phd Student Institute of Sport Health Sciences

<sup>&</sup>lt;sup>2</sup> Islamic Azad University Tehran Central Branch Phd Student Department of Exercise Physiology

<sup>&</sup>lt;sup>3</sup> Payame Noor University Tehran Ir of Po Box Ondokuz395- 4697 Department of Sport Science

systolic blood pressure (p=0.517) and diastolic blood pressure (p=0.502) was observed. There was a significant difference in the performance of agility test in the experimental groups (p<0.05).

*Conclusion:* based on the result of this research, 4 weeks of HIIT activities is not sufficient to produce significant change in indices of blood lipids. However, considerable changes were observed in the body fat percent and agility performance in the 60/30 activity- rest condition.

Keywords: High Intensity Interval Training (Hut), Body Composition, Blood Lipids, Agility, Overweight Women

### OP. 555 THE EFFECT OF NUTRIONAL HABITS ON GROWTH HORMONES IN THE ADELOSCENT PERIOD OF BALLET STUDENTS

Yagmur Arınlı<sup>1</sup>, Manolya Akın<sup>2</sup>, Seyit Ahmet Uçaktürk<sup>3</sup>, Mehmet Burak Yavuz Çimen<sup>4</sup>

- <sup>1</sup> Mersin University State Conservatory Department O Fballet Art
- <sup>2</sup> Mersin University School of Physical Education and Sports
- <sup>3</sup> Repuclic of Turkey Ministry of Health Mersin Maternity and Children Hospital Pediatric Endocrinology
- <sup>4</sup> Mersin University Faculty of Medicine Department of Biochemistry

#### **Abstract**

Purpose: The purpose of this study was to search of nutritional habits on growth hormones in adolescent girl-ballet student and to investigate any difference between sedanter individuals. Materials and Methods:

The 23 Ballet students, ages 10-18 years old in Mersin University Satete Conservatory Departments of Ballet, participated for the study who have been studying ballet mean 6±2 hrs/week for a year. The 23 sedanter for control have been choosen from individuals who never study ballet and any kind of sports. The survey of EAT-40 and Women Sports Triad were used to determine the nutrional habits of the individuals who were participated in the study. The Crohnbach alpha coefficient was calculated for internal coherence of response of EAT-40 Eating Attitude Scale (0,75). The distinction of EAT-40 (under 21, 21-30, upper 30) between ballet and control group was calculated by Ki-Square analyses. Student t test was used for analysing the EAT-40 score-mean differences between ballet and control groups. For data-assessment of questions of Women Sports Triad was used Ki-Square analyses. Physical and antropometric features were measured and Durnin Womersley Equation was used for assessment of body-fat ratio. Health Carter Equation was used for Somatotype and the difference between ballet and control groups were compared by Student t test. To determine of growth, assesment of Tanner Stages were performed by Two Way Variance Analysis. The bone-age was detected by left-hand radiographic atlas as Greulich-Pyle standarts and the difference between Calender age and Bone age were analysed by Student t test. The levels of IGF-1 and IGFBP-3 were measured by Student t test.

#### Results:

Determining result of EAT-40, the statistically significant diffrences between ballet and control groups (p=0.039). The assessment of questions in Women Sports Triad Anket such as low calorie intake (p=0.036) and regular menstruation (p=0.027) were found statistically significant. It was found insignificant difference between ballet and control groups when determined Tanner Stages and Ages (p>0.05). As compared somatotypes, it was found significant differences in Endomorphy (p=0.001), Mezomorphy (p=0.052) and Ectomorphy (p=0.013). It was found statistically significant difference between ballet and control groups as compared in Body Fat percent (p<0.001), Eight Region Total Fat percent (p<0.001) and Body Mass Index (p=0.003). The Calendar age and the Bone age were not found a very quite difference between ballet and control groups (p>0.05). The Body Mass Index was found a very meaningful difference (p=0.003). The evaluation of IGF-1 and IGFBP-3 were not found a meaningful difference between the groups (p>0.05). Conclusion:

113

With the view of this study, although the nutrition of adolescent ballets are insufficient comparing to the control group, their regular exercising doesn't affect their bone development and growth negatively. The somatotype of the ballet group has been classified ectomorphically for the first time. While the age of getting periods is same with the ballets and the control group, some irregularities have been observed. The reason of these irregularities is considered to be the eight region total fat per cent of the ballets comparing to the control group. According to the evaluation of IGF-1 and IGFBP-3, it is concluded that the intensity of ballet exercises don't repress hormonal development and the food intake is not in a dangerous dimension.

Keywords: Ballet, Adolescent, Tanner Stages, Nutrition, Growth Hormones

### OP. 556 THE EFFECT OF TRAINING WITH KANGOO JUMPS SHOES ON THE BALANCE, LEG STRENGTH AND SHOTS RATIO IN WOMEN BASKETBALL PLAYERS

Manolya Akın<sup>1</sup>, Aşina Durmuş <sup>2</sup>

<sup>1</sup> Mersin University School of Physical Education and Sports

#### Abstract

Purpose: The purpose of this study was to examine the effect of Kangoo jumps balance training on 15-16 years old woman basketball players for 8 weeks ( n=10). Adana DSİ women basketball clup athletes joined this study.

Methods: In order to investigate the effects of Balance training on the basketball players; physical and anthropometric characteristics and motor abilities (balance, jump and smash shot) were measured. For measurement of physical properties, height, weight, and leg length were used. As anthropometric measurements, skinfold thickness, which was taken from the 6 parts, and circumference and diameter measurements were used. To measure motor characteristics; balance (techno body and Y-balance test), vertical jump and standing long jump and shot hit ratio tests, determined by shots from 5 different places, were applied.

Result: In women's basketball athletes; body weight (p <0.005), BMI (p <0.005), skinfold (p <0.005), hip circumference (p <0.005), calf (p <0.002), vertical jump (p <0.000), standing long jump (p <0.000), Y balance test for both feet three regions (p <0.002, p <0.000, p <0.001), Technobody balance measurements (easy hands open and hands closed) (p <0,049, p <0,013) and in the analysis of a shot at first striker region (p <0.006) a significant difference hasn't been seen, whereas in the statistical measurement of the size (p> 0.408) , leg length (p> 0.103), humeral epicondyle (p>, 413), foot length (p> 0.072), biceps circumference (p <0.555) and contraction of the biceps circumference (p> 0.180) a significant difference has been found.

Conclusions: As a result, it has been found that the balance training with women basketball players improve physical and motoric (balance, bounce) properties.

Keywords: Balance, Basketball, Kangoo Jumps

### OP. 557 THE EFFECT OF PRECONDITIONING STRATEGIES ON ISOKINETIC STRENGTH IN ELITE KICK BOXING ATHLETES

Atakan Yılmaz<sup>1</sup>, Veli Volkan Gürses<sup>2</sup>, Mustafa Gülşen<sup>3</sup>, Mustafa Şakir Akgül<sup>2</sup>

#### **Abstract**

**Objectives:** Sports scientists, trainers and strength and conditioning professionals spend the majority of the competition period trying to ensure maximum performance on competition day. Performance

<sup>&</sup>lt;sup>2</sup> Mersin University School of Physical Education and Sports

<sup>&</sup>lt;sup>1</sup> Başkent University Department of Sports Science

<sup>&</sup>lt;sup>2</sup> Ankara University Faculty of Sport Sciences

<sup>&</sup>lt;sup>3</sup> Başkent University Hospital Department of Physical Therapy and Rehabilitation

can be acutely enhanced with a number of preconditioning strategies. These strategies include appropriately designed passive and active warm-up, postactivation potentiation (PAP), ischemic preconditioning (IP), prior exercise and hormonal preconditioning (HP) (Killduf et.all., 2013). The aim of this study was to examine the effect of Preconditioning Strategies on isokinetic strength in Elite Kick Boxing athletes.

**Methods:** 15 male Kick boxing athletes (age:  $22,38 \pm 4,01$ yrs, height:  $1,80 \pm 1,05$ cm, body mass: 77,9  $\pm$  8,01kg) participated in this study voluntarily. Peak isokinetic knee extension and flexion torques were determined at  $60^{\circ}$ .s<sup>-1</sup>,  $180^{\circ}$ .s<sup>-1</sup> and  $240^{\circ}$ .s<sup>-1</sup> by 770 isokinetic leg dynamometer (Lumex Inc, Ronkonkoma, NY, USA) for each right and left leg. Athletes were divided into 2 groups (test n=8; placebo n=7) randomly. For the test group respectively prior exercise (Cook et.all. 2013), IP (Crisafulli et.all. 2011), active warm-up (Killduf et.all. 2013), HP (Killduf et.all. 2008) and PAP (Faigenbaum et.all. 2006) were implemented before the second isokinetic knee extension and flexion test. For the Placebo group strength training was not applied in the morning, PAP, IP and the HP as not to create the effect of isokinetic leg strength measurements after the application was implemented.

**Results:** Results indicated significant differences between pre-post test in right leg  $240^{\circ}$ /s knee extension work (z=-2,34; p=.019), right leg  $180^{\circ}$ /s knee flexion (z=-2,04; p=.041), right leg  $180^{\circ}$ /s knee flexion work (z=-1,99; p=.046), left leg  $180^{\circ}$ /s knee flexion (z=-2,44; p=.014), left leg  $180^{\circ}$ /s flexion work (z=-1,98; p=.044), left leg  $240^{\circ}$ /s knee flexion (z=-2,55; p=.011) and left leg  $240^{\circ}$ /s knee flexion work (z=-2,48; p=.013). In placebo group results indicated significant differences between pre and post test in right leg  $240^{\circ}$ /s knee extension work (z=-2,20; p=.027) and left leg  $180^{\circ}$ /s knee flexion (z=-2,20; p=.027).

**Conclusion:** It can be said that Preconditioning Strategy could be used to increase exercise performance.

Keywords: Preconditioning Strategies, Isokinetic Strength

### OP. 572 COMPARISON OF MUSCLE DAMAGE IN SOCCER PLAYERS AFTER PLAYING MATCHES ON ARTIFICIAL TURF AND NATURAL TURF FIELDS

 $\underline{\mathsf{Serdar}\,\mathsf{Sucan}}^1,\,\mathsf{Soner}\,\mathsf{Akkurt}^2$ , Alper Gümüş $^3$ , Mehmet Karakuş  $^2$ 

### **Abstract**

**Purpose:** We have attempted to compare muscle damage in soccer players after matches on artificial and natural turf fields.

**Methods:** The study was performed on 22 male amateur soccer players, aged 20-25, playing at Erciyes University Soccer Team. After obtaining permissions from the the local ethics comitee and players themselves, the players were divided into two teams. A match was played under FIFA rules on artificial turf field, and another one was played two weeks later on natural turf field. Before and after both matches, players had three non-exercise days, and VAS scores and blood samples were taken before match, after match and at 72. hour. Goalkeepers, players who couldn't play in both matches, injured players and players who didn't follow their resting periods were excluded from the study. CK, AST, LDH values were measured from the blood samples via spectrophotometric method, and myoglobin (Mb) was measured via immunochemical method.

**Results:** Results from 16 participants were evaluated. VAS, Mb, CK, AST and LDH values after the matches played on artificial and natural turf fields were found to be statistically significantly higher than the values obtained before the matches. For 72 hour values, only the VAS score for artificial turf field was significantly higher than pre-match values.

<sup>&</sup>lt;sup>1</sup> Erciyes University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Erciyes University Faculty of Medicine Department of Sports Medicine

<sup>&</sup>lt;sup>3</sup> Ministry of Health Haseki Education and Research Hospital

The rate of increase for VAS, Mb, CK, AST and LDH between pre-match and post-match and between pre-match and 72. hour values were calculated. When the rate of increase was compared between artificial turf and natural turf field, it was found that post-match VAS and CK values for artificial turf field were statistically significantly higher than natural turf field values. However, only the VAS score for artificial turf field was found to be higher than natural turf field at 72 hours.

**Conclusion:** According to these findings, it can be concluded that muscle damage occurs after matches on artificial turf and natural turf fields, and that muscle damage on artificial turf field is higher than the damage on natural turf field and takes longer to recover.

Keywords: Muscle Damage, Soccer Players, Natural Turf Field, Artificial Turf Field

## OP. 575 DEVELOPMENT OF REGRESSION EQUATIONS FOR ESTIMATING BODY FAT PERCENTAGE OF MALE SOCCER PLAYERS

Hüseyin Aslan<sup>1</sup>, Ümid Karlı<sup>2</sup>, Alpay Güvenç<sup>3</sup>, Orhan Ahmet Şener<sup>1</sup>, Caner Açıkada<sup>4</sup>

- <sup>1</sup> Selçuk University School of Physical Education and Sports
- <sup>2</sup> Abant İzzet Baysal University School of Physical Education and Sports
- <sup>3</sup> Akdeniz University School of Physical Education and Sports

#### Abstract

Introduction and Purpose: Body composition is the health-related component of physical fitness and is associated with successful participating in elite sports. Therefore it is widely used by physicians, athletics trainers and health professionals for determination of the fitness level of athletes. Currently, DEXA has been considered as the gold standard for the measurement of body composition. However, assessment of body composition components with DEXA is an expensive method, requires sophisticated laboratory equipment and is quite time-consuming. On the other hand, using anthropometric measurements provides an affordable and practical assessment of body fat percentage (BF%) in field. However, anthropometric measurements are relatively safe, quick, cheap and non-invasive method for the assessment of body composition, use of inappropriate equations can lead systematic or non-systematic prediction errors. Therefore, population specific equations are needed for the proper assessment of the body composition of the special groups such as soccer players. The purpose of this study was to develop population specific equations for estimating body fat percentage of male soccer players by using anthropometric measurements.

Materials and Methods: Fifty one regularly trained male (age:  $18.51\pm1.26$ yr; stature:  $174.61\pm5.85$ cm; body weight:  $69.31\pm7.66$ kg) Caucasian soccer players were participated in this study. Each subjects circumference (neck, shoulders, mid upper arm, flexed upper arm, fore arm, wrist, abdominal, hip, mid-thigh and calf), breath (biacromial, bideltoid, biiliac, bitrochanteric, humerus biepicondyle and femur biepicondyle) and skinfold (triceps, abdominal, biceps, suprailiac I, suprailiac II, subscapular, chest, thigh and calf) measurements were recorded and body fat percentage (BF%) was measured by using the dual-energy X-ray absorptiometry (DEXA). Stepwise Multiple Linear Regression Analysis was performed using the BF% value obtained by DEXA as the reference variable and other measured anthropometric items as the explanatory variables in order to form prediction equations (EQ). Validity of the equations was examined with Cross Validation Method.

**Results:** Totally three equations were derived for BF%. The multiple coefficient of determination ( $R^2$ ) and standard error of estimation (SEE) of the equations are given as followed:  $R^2$  =0.85, SEE =2.38% (EQ1);  $R^2$  =0.83, SEE =2.48% (EQ2); and  $R^2$  =0.79, SEE =2.77% (EQ3). By the use of Stepwise Linear Regression Analysis, the results of this study indicated that subscapular and thigh skinfold thickness and abdominal circumference as ideal explanatory variables for estimating BF% of male soccer players.

**Conclusion:** Finally, cross validated prediction equations with high R<sup>2</sup> and low SEE were derived for BF% of male soccer players. It concluded that subscapular and thigh skinfold thickness and abdominal

<sup>&</sup>lt;sup>4</sup> Hacettepe University Faculty of Sport Sciences

circumference as explanatory variables for the best equation to estimate BF% of male soccer players.

Keywords: Anthropometric Measurements, Regression Equation, DEXA and Body Fat Percentage

### OP. 600 TAEKWON-DO ATHLETES BONE MINERAL DENSITY AND HYPERMOBILITY

Manolya Akın<sup>1</sup>, Zahide Kantar Uz <sup>1</sup>

### **Abstract**

Purpose: The purpose of this study is to examine the hiperactivity, body composition and bone mineral density difference between the ones who do not take part in any sports and Taekwondo athletes in the age group of 10 and 18. Total number of 152 students, 113 athletes, 38 of whom were girls and 75 of whom were boys, and 39 control, 16 of whom were girls and 23 of whom were boys , participated in the study voluntarily in Mersin. The athlete group was chosen from those who have been doing sports actively for the past year and the control group from individuals who have never done any sports. In order to determine the physical condition of the participants, they were evaluated for both physical and antropometrik aspects.

Methods: To determine the physical condition of the participants physical and anthropometric characteristics were measured. Womersley Durnin to assess body fat percentage and the Healt Carter somatotype equation was used for. Hypermobility Syndrome Beighton criteria for measuring the cut-off point 5 while, to measure the force; standing long jump, vertical jump (JM), grip strength test was applied. For the measurement of bone mineral density DEXA (Dual Energy X-ray Absorptiometry) is used.

Result: Durning Fat Percentage, Eight Regional skinfold thickness, vertical jump and standing long jump values showed difference (p <0.05) according to gender, athletes and sedentary lifestyle variables. Right and left hand grip strength with the variable of gender, and the state of being sedentary athletes-significant difference werenot found (p> 0,05). Bone mineral density values show a significant difference between athletes and nonathletic (p <0.05); Taekwondo athletes bone mineral density values were higher than in nonathletic subjects. According to gender BMD difference was not statistically significant (p> 0,05). However, in athletes and sedentary group gender difference were found (p <0.05). Accordingly, the values of bone mineral density in both female and male tackwondo athletes were higher than in sedentary subjects. Bone mineral density in girls with variable endomorphy, ectomorphy, body fat percentage 8 regional Skinfold thickness and BMI's t values coefficient is significant (p < 0.05); mesomorphy variable was not significant (p> 0.05). In men, t-value obtained for anthropometric characteristics, the regression coefficient for a variable was not significant (p> 0.05). BMD and standing long jump variable regression coefficients were significant (p < 0.05), vertical jump, and grip strength variables were not significant (p> 0,05). Both gender and, athletes or sedentary state of being there is no significant relationship between the state of being hypermobile (p> 0.05). Hypermobile the state of being gender and athletes- no athletes according to their - 30.7% of male athletes, 69.3% of nonhipermobil being, the state of being hypermobile 21.7% of male sedentary, 78.3% of nonhipermobil to be seen. Accordingly, athletes and sedentary in men according to their status of being hypermobile were not a significant relationship between.

Conclusions: Both male and female taekwondo athletes' bone mineral density values are higher than sedentary women. Accordingly, the sport of taekwondo can be said to improve bone mineral density. Beighton criteria; Athlete or the state of being sedentary and there is no significant relationship between the state of being hypermobile.

Keywords: Bone, Hiperactivity, Strength, Injury Rates, Physical Profile

<sup>&</sup>lt;sup>1</sup> Mersin University School of Physical Education and Sports

### OP. 605 THE EFFECT OF DEFENSIVE STRATEGIES ON THE PHYSIOLOGICAL RESPONSES AND TIME MOTION CHARACTERISTICS IN SMALL SIDED GAMES

### Hamit Cihan<sup>1</sup>

#### **Abstract**

**Objective:** Despite the abundance of small-sided game (SSG) studies in the literature, to our knowledge no study has investigated time-motion characteristics of Man-Marking (MM), and physiological and time-motion demands of Double-Man Pressure (DMP). Therefore the purpose of this study was to investigate the effects of alterations in the defense strategies on physiological responses and time-motion characteristics during 3x4min small-sided games (SSGs) in young soccer players.

Method: Eighteen young soccer players (M<sub>Age</sub>=19.6±0.5 years, M<sub>Height</sub>=178.3±4.6 cm, M<sub>Weight</sub>=71.9±7.5 kg) voluntarily participated in SSGs with different defensive strategies (FP: Free Play, MM: Man-Marking, DMP: Double-Man Pressure). Heart rate (HR), and total distance covered in different speed zones were monitored during all SSGs, whereas venous blood lactate (La<sup>-</sup>) were determined at the end of the last bout of each SSG. The data was interpreted in terms of means and standard deviations. Shapiro-wilk test was used to verify normal distribution and Levene's test was applied to assess the homogeneity of variance. A one-way repeated measures analysis of variance (ANOVA) was used to test significance for HR, %HR<sub>max</sub>, BLC, RPE, TD and speed categories between FP, MM and DMP. The *post-hoc* Bonferroni test was also applied whenever any significant difference was found between FP, MM and DMP. For each ANOVA, partials eta squared were calculated as measures of effect size.

**Results:** Significant differences were found between FP, MM and DMP in terms of HR (F=10.10; p=0.001;  $\eta^2$ =0.37) and %HR<sub>max</sub> (F=81.11; p=0.001;  $\eta^2$ =0.82). Post-hoc analysis indicated that HR and %HR<sub>max</sub> values for the DMP conditions were significantly (p<0.05) higher compared to MM and FP conditions, furthermore MM condition was significantly (p<0.05) higher compared to FP condition. There were significant differences between FP, MM and DMP conditions in terms of BLC (F=23.82, p=0.001,  $\eta^2$ =0.58). Post-hoc analysis indicated that the average BLC level for DMP were significantly (p<0.05) higher than FP and MM. Furthermore, MM condition was also significantly (p<0.05) higher compared to FP.

Total covered distance and the speed categories (0-6.9 km.h-1, 7.0-12.9 km.h-1, 13.0-17.9 km.h-1 and >18 km.h-1) values for FP, MM and DMP conditions. Significant differences were found between FP, MM and DMP in terms of TD (F=7.21; p=0.01;  $\eta^2$ =0.29). Post-hoc analysis indicated that the TD during MM and DMP conditions were significantly (p<0.05) higher compared to the FP condition, however no significant difference was found between MM and DMP conditions. Significant effect was not detected between FP, MM and DMP for stationary/walking (F=3.44; p=0.43;  $\eta^2$ =0.16), however significant difference was detected for low-intensity running (F=4.67; p=0.01;  $\eta^2$ =0.21), medium-intensity running (F=7.60; p=0.02;  $\eta^2$ =0.30) and high-intensity running (F=13.67; p=0.01;  $\eta^2$ =0.44). For low-intensity running, MM condition was significantly (p<0.05) higher compared to DMP and FP and no significance was found between FP and DMP conditions. For medium-intensity running, DMP and MM conditions were significantly (p<0.05) higher compared to FP condition, however no significant difference was found between MM and DMP conditions. For high-intensity running, DMP condition was significantly (p<0.05) higher compared to MM and FP. Furthermore MM condition was also significantly (p<0.05) higher compared to FP.

**Conclusion:** The findings of this study revealed that the alterations in the defensive strategies brought about different physiological responses and time motion characteristics during the course of small sided games. Therefore, it is recommended for the coaches to prefer DMP or MM defensive strategies if they target higher physiological responses and high-intensity running during the small sided games.

Keywords: Defensive Strategy, Aerobic Endurance, Heart Rate, Lactate, Time-Motion Analysis

<sup>&</sup>lt;sup>1</sup> Karadeniz Technical University School of Physical Education and Sports

## OP. 618 INVESTIGATING EFFECTS OF AEROBIC EXERCISE AND COMBINED EXERCISE PROGRAMMES ON BODY COMPOSITION AND RESTING METABOLIC RATE

<u>Kübra Altunsoy</u><sup>1</sup>, Yılmaz Uçan <sup>2</sup>

- <sup>1</sup> Kırıkkale University School of Physical Education and Sports
- <sup>2</sup> Abant İzzet Baysal University School of Physical Education and Sports

#### Abstract

**Purpose:** The purpose of this study was to investigate effects of 8 week aerobic exercise and combined exercise on body composition and resting metabolic rate.

Method: Twenty-two 18-25 year old sedentary women whose body fat % were between 25 and 35 were volunteered for the study. The group was divided into 3 groups as control group (CG), aerobic exercise group (AEG) and combined exercise group (CEG) by random selection method. A written informed consent was obtained from all subjects before participation. The study was approved by the ethical board of the Abant İzzet Baysal University School of Medicine Clinical Laboratory Research, Bolu, TURKEY. Initially, resting metabolic rate (RMR), body mass index (BMI), body fat % (BF), Fat free mass (FFM), waist girth (WG), hip girth (HG) and waist to hip ratio (WHR) of the subjects were measured. Then AEG participated in exercise on treadmill and moonwalker 3 times a week during 8 weeks with the intensity of 75-80% which was determined by carvonen method. Each exercise session consisted of 5-10 minute warm up part, 50 minute main part and 5 minute cool down part. CEG was participated in 30 minute strength exercise firstly. The strength exercise programme consisted of 11 drills: Lat Pull-down, Leg Extensions, Lying Leg Curls, Leg Press, Bench Press, Calves Raises, Seated Row, Biceps Curl, Triceps Extension, Shoulder Front Raises, and Crunches. After 5-10 minute warm up part, CEG participated in strength exercise programme which was done with 50-60% of 1 repetition maximum weight. The exercise made up of 3 sets and 10-12 repetitions. There were 30-40 seconds between sets and 60-90 seconds between drills for recovery. After the strength exercise, there was a 5 minute recovery part. Later, the group participated in an exercise on treadmill and moonwalker with the intensity of 75-80% which was determined by the carvonen method. Aerobic exercise programme consisted of 5 minutes of warm up part, 25 minutes of main part and 5 minutes of cool down part. After an 8 week exercise period, all measurements were repeated. All results were analyzed statically. Kruskal Wallis test was used to assess the differences between the pretests of groups. Wilcoxon signed ranks test was used to find out differences between pretest and posttest of resting metabolic rate and body composition values. To find out the differences between posttests and pretests differences of groups Kruskal Wallis test was used. The values which were significant after Kruskal Wallis test were analyzed by Man Whitney U test. The purpose of Man Whitney U test is to determine differences between groups. SPSS 17 package programme was used for statistical analyze and if p<0, 05, the values were called significant.

**Findings:** As a result of the analyze, in the beginning of the study while RMR value of AEG was  $1187,12 \pm 94,21$  kcal/day, after 8 weeks, it increased to  $1364,50 \pm 127,59$  kcal/day. Waist girth of AEG was  $72,87 \pm 4,22$  cm before the exercise, but decreased to  $68,75 \pm 2,59$  cm and hip girth was  $104,00 \pm 2,39$  cm before exercise, but decreased to  $101,18 \pm 2,28$  cm after 8 weeks. These changes were found statistically significant (p<0,05). There were no significant differences on BW, BMI, FFM, BF, WHR values of AEG. In the beginning of the study while RMR value of CEG was  $1175,14 \pm 83,29$  kcal/day, after 8 weeks it increased to  $1314,71 \pm 181,34$  kcal/day. Waist girth of CEG was  $72,57 \pm 4,68$  cm before the exercise, but decreased to  $69,64 \pm 4,60$  cm. Meanwhile, hip girth was  $102,71 \pm 3,25$  cm before the exercise, but decreased to  $100,071 \pm 2,89$  cm and WHR was  $0,706 \pm 0,03$  cm before the exercise, but decreased to  $0,695 \pm 0,03$  cm after 8 weeks. These changes were found statistically significant (p<0,05). There were no significant differences on BW, BMI, FFM, BF values of CEG. There were no significant differences in any values of CG. As a result of comparing the differences between post tests and pretests, BW value was found significantly different between AEG-CEG and between AEG-CG. WG and HG values were found significantly different between

AEG-CG and between CEG-CG. No significant differences were found within the other parameters of the values.

**Results:** Consequently, an 8 week aerobic exercise which is planned for 18-25 year women, whose body fat percent is between 25-35, causes increase in RMR values and decrease in WG and HG values. Combined exercise causes increase in RMR values and decrease in WG, HG and WHR values.

Keywords: Resting Metabolic Rate, Combined Exercise, Body Composition

### OP. 621 EFFECTS OF VO2MAX TEST DURATION AND INITIAL WORKLOADS ON O2 CONSUMPTION

Ramazan Aydınoglu<sup>1</sup>, Gorkem Aybars Balcı<sup>1</sup>, Bulent Yapıcıoglu<sup>1</sup>, Muzaffer Colakoglu<sup>1</sup>, Ozgur Ozkaya<sup>1</sup>

#### **Abstract**

**Purpose:** Cardiovascular anaerobic catastrophic model criticisms remind that general characteristics of standard graded exercises tests (GXT) used to determine VO<sub>2maks</sub> should be reexamined. The purpose of this study was to examine revealed O<sub>2</sub> consumption values obtained from GXTs terminated in different durations and verification phases (VP) following these GXTs by using a cycle ergometer and elliptical trainer.

**Method:** Eight moderate well-trained athletes (22.6±2 years; 58.2±7 mL·min<sup>-1</sup>·kg<sup>-1</sup> VO<sub>2max</sub>) volunteered to take part in this study. After GXTs terminated within 4<sup>th</sup>, 6<sup>th</sup>, 10<sup>th</sup> and 16<sup>th</sup> minutes, constant-load VPs at a workload corresponding to wattages used in the last stage of GXT were performed by using a cycle ergometer and an elliptical trainer. Tests were terminated when the participants were obliged to end protocols because of their voluntary exhaustion. i)  $\geq$ 1,1 RQ values, ii)  $\geq$ %90 of maximum heart rate and iii)  $\geq$ 19 rate of perceived exhaustion scales were accepted to verify this exhaustion. Because of the repeated measures, following ANOVA, LSD as post-hoc was used to determine differences between groups.

**Results:** Results of this study showed that the highest  $VO_{2maks}$  values were obtained from GXTs focused on exhaustion within  $6^{th}$  minute or VPs belonging to those GXTs by using both elliptical trainer and cycle ergometer (p<0.05). Initial workloads of GXTs exhaustion-purposed within  $6^{th}$  minute corresponded to approximately 78% of  $O_{2maks}$  for cycle ergometer and 83% of  $VO_{2maks}$  for elliptical trainer.  $VO_{2maks}$  values obtained from VP were greater than the  $VO_{2peak}$  values obtained from GXT for three athletes during cycling tests and one athlete during elliptical trainer test. **Discussion and conclusion:** According to results of this study, the best procedure to reveal real

 $VO_{2maks}$  is to apply a GXT terminated within  $6^{th}$  minute, and then, verify this value via constant-load VP by using a workload corresponding to determined  $VO_{2peak}$  during GXT.

This study entitled "Effects of VO2max, test duration and initial workloads on O2 consumption" was presented in 14th National Sports Medicine Congress, December 12-14, 2013, Izmir, Turkiye.

Keywords: Cardiovascular Anaerobic Catastrophic Model, Graded Exercise Test, Verification Phase

<sup>&</sup>lt;sup>1</sup> Ege University School of Physical Education and Sports

### OP. 622 DETERMINATION OF VO2MAX AND VVO2MAX VALUES IN DIFFERENT SPORT AND ITS RELATION TO TLIM DURATION

Gökhan Umutlu<sup>1</sup>, Ayhan Taner Erdoğan <sup>1</sup>, Uğur Can <sup>1</sup>

#### **Abstract**

PURPOSE: VO2max is an important determinant of athletic performance in sport events which based on measurement of the maximum rate of oxygen consumption as measured during incremental exercise, most typically on a motorized treadmill. Yet, the recent studies claim that this criterion is insufficient due to variabilites in vVO2max levels of athletes who have similar VO2max values. Besides; many of the these studies suggest in addition to VO2max and vVO2max, Tlim is one of the best determinants to distinguish performance levels based on the principles of the evaluation of time limits that athletes were capable to sustain until exhaustion at their vVO2max. Taking this into consideration, the purpose of this study was to determine VO2max, vVO2max and Tlim parameters and investigate the relationship between VO2max and Tlim at vVO2max.

METHOD: A total of 37 athletes who actively perform in their branches participated in this study which consists of; bike (N= 8: 24,75±5,28 years, 177,63±6,65cm, 70,21±7,37kg); muay thai (N=10: 20,60±3,47years, 173,60±5,30cm, 68,90±10,54kg); soccer (N= 10: 21,30±3,62years, 175,00±5,89cm, 68,29±7,23kg); track and field (N=9: 19,44±2,46years, 174,00±6,46cm, 64,71±6,26kg) events in Mersin province. Athletes performed two laboratory tests in same conditions at one week of interval, first for identifying of VO2max and vVO2max and the second for assessing of Tlim at their vVO2max. At the same time, antropometric measurements obtained by means of BIA (Bioelectrical Impedance Analysis) both before VO2max and Tlim at vVO2max test. Throughout the tests ECG and heart rates of individual's monitored via an ECG adapter integrated with device.

RESULTS: The results of statistical analyses detected that both for Track and Field (U=6,50, Z=-3,21, p<0,001) and Soccer events (U=9,50, Z=-3,14, p<0,001) were significantly superior in terms of vVO2max compared to Muay Thai. In the same way, VO2max values of Track and Field (U=4,00, Z=-3,35, p<0,001) and Soccer events (U=3,50, Z=-3,51, p<0,001) were significantly higher compared to Muay Thai. But no significant relationship was observed between VO2max and Tlim and vVO2max and Tlim.

CONCLUSION: Since there isn't any significant difference in terms of antropometric and demographic parameters among sport branches, it indicates that the variation between VO2max, vVO2max and Tlim values is not related to these parameters.

It could be speculated that the variations between the sport branches might be related to at which content these branches includes running in their characteristics.

Average running distance for soccer players is 10-12 km while it is approximately 4,4-7,5 km for basketball players therefore it was claimed that VO2max values are higher for soccer players. In addition, it can be thought that general characteristics of the sport branches might have an effect on VO2max values.

In conclusion, the vVO2max may vary among branches but the differences were not significantly affect time to exhaustion durations of the branches.

Keywords: Maximal Oxygen Consumption, Time To Exhaustion, Running Velocity.

<sup>&</sup>lt;sup>1</sup> Mersin University School of Physical Education and Sports

### OP. 623 EVALUATION OF PLATEAU IN VO2 AND ITS RETEST RELIABILITY IN VO2MAKS TESTS

Ramazan Aydınoglu<sup>1</sup>, Gorkem Aybars Balcı<sup>1</sup>, Bulent Yapıcıoglu<sup>1</sup>, Muzaffer Colakoglu<sup>1</sup>, Ozgur Ozkaya<sup>1</sup>

#### Abstract

**Purpose:** According to Central Governor criticism, it is claimed that exhaustion during exercise intensity at VO<sub>2maks</sub> stems from brain and its myocardial inhibition rather than peripheral fatigue in skeletal muscles. Many important study results highlighted that there are conflicting results related with plateau in O<sub>2</sub> uptake curve during a standard maximal graded exercise test (GXT). The purpose of this study was to examine plateau in VO<sub>2</sub> and its retest reliability obtained from verification phases (VP) following GXTs by using an elliptical trainer and cycle ergometer. This study is the first research to examine a plateau during VPs and its retest reliability.

Method: Eight moderate well-trained athletes (22.6±2 years;  $58.2\pm7$  mL·min<sup>-1</sup>·kg<sup>-1</sup> VO<sub>2max</sub>) volunteered to take part in this study. After GXT applications terminated within 4<sup>th</sup>, 6<sup>th</sup>, 10<sup>th</sup> and 16<sup>th</sup> minutes, constant-load VPs (VP<sub>I</sub>: following GXT; VP<sub>II</sub>: next day) at a workload corresponding to wattages used in the last stage of GXT were performed by using a cycle ergometer and an elliptical trainer. Plateau in VO<sub>2</sub> was accepted as a smaller difference than 150 mL during the best 30 seconds in VO<sub>2</sub>. Tests were terminated when the participants were obliged to end protocols because of their voluntary exhaustion. i)  $\ge$ 1,1 RQ values, ii)  $\ge$ %90 of maximum heart rate and iii)  $\ge$ 19 rate of perceived exhaustion scales were accepted to verify this exhaustion. Because of the repeated measures, following ANOVA, LSD as post-hoc was used to determine differences between groups. Pearson r and ICC was used to analyze correlation coefficient.

**Results:** The findings showed that there were six different patterns in VO<sub>2</sub> as follows; i) a linear increase in VO<sub>2</sub> (n=11 for GXT; n=6 for VP), ii) a peak then, a second decrease in VO<sub>2</sub> (n=21 for GXT; n=13 for VP), iii) a plateau in VO<sub>2</sub> (n=29 for GXT; n=42 for VP), iv) a plateau then, a decrease in VO<sub>2</sub> (n=14 for GXT; n=25 for VP) v) a plateau then, an increase in VO<sub>2</sub> (n=9 for GXT; n=11 for VP), vi) another form (GXT n=9). These results showed that tests would be terminated without observing a plateau (n=60), with a second increase following a plateau (n=20) or decrease following a plateau (n=39). Therefore, the plateau was not able to be used for primary test termination criteria for the GXT or VP. Surprisingly, although plateau in VO<sub>2</sub> was not able to be determined for each participant (61% of results were characterized with plateau), there were highly reliable results in the retest measurements of the individuals (ICC>0.85; r>0.85).

**Discussion and conclusion:** According to results of this study, it was shown that plateau in  $VO_2$  was not able to be used as primary test termination criteria for the GXT or VP. However, it serves highly reliable retest results in repetitive measures of individuals. In conclusion, the plateau in  $VO_2$  as a highly reliable factor can be important to guide training programs of athletes.

This study entitled "Evaluation of plateau in VO2 and its retest reliability in VO2max tests" was presented in 14th National Sports Medicine Congress, December 12-14, 2013, Izmir, Turkiye.

Keywords: Central Governor, Graded Exercise Test, Verification Phase

<sup>&</sup>lt;sup>1</sup> Ege University School of Physical Education and Sports

### OP. 625 TREADMILL PROTOCOLS WITH SHORT DURATION AND ABRUPT INCREASE IN SPEED ARE MORE EFFECTIVE IN DETERMINING VO2MAX: A NEW APPROACH

Ayhan Taner Erdoğan <sup>1</sup>, <u>Gökhan Umutlu</u> <sup>1</sup>, Uğur Can <sup>1</sup>

#### **Abstract**

PURPOSE: Graded exercise test protocols were used systematically to determine exercise capacity of athletes. Due to different speed and grade characteristics of these protocols, the duration to reach VO2max differs. The conducted studies indicated that the ideal time to reach VO2max varies between 6 and 12 minutes. In the studies done before found that, VO2max values which obtained through vigorous protocols where speed and grade increases at frequent intervals was found to be significantly higher compared to the ones that are less intensive and take longer duration to reach VO2max.

In the protocol that was used to determine VO2max by Billat et al., treadmill speed starts at 8 km/h and speed was increased 1 km/h for every minute until the individual reach his maximum (PRTK1). The other protocol developed by the same investigators relies on running to exhaustion principles at the minimum speed where VO2max value was reached as mentioned above. There is not any grade increase in none of these protocols.

VO2max values obtained through the protocols where there was an increase in grade, speed or both were investigated and the differences were revealed. Yet, these two protocols that Billat et al. conducted were not compared to each other in terms of VO2max values. The purpose of this study was to compare VO2max, Respiratory Exchange Ratio (RER), test duration and Hearth Rate (HR) values obtained from PRTK1 where speed was increased gradually and PRTK2 where speed was increased abruptly.

METHOD: A total of 36 active athletes were included in this study whose ages varied between 17 and 33 (age: 21,39±6,07 years; height: 175±4,14cm; weight; 67,91±8,28kg; % body fat: 11,41±5,40). Upon arrival to the laboratory height and weight measurements were taken to assess antropometric characteristics and body fat percentages were measured through Bioelectric Impedance Analysis. As a warm-up period for PRTK1 protocol, treadmill was initiated at 5 km/h and the speed was increased 1 km/h for every minute, respectively. Once the treadmill speed reached at 8 km/h test was started and continued until the individual terminate the test voluntarily or reach the VO2max criteria. Throughout the subject the individuals were given verbal encouragements. The speed at which individuals elicited VO2max was recorded for the next protocol.

Athletes visited the laboratory one week later following to first test and underwent a 15 minutes warm-up session at % 60 intensity at their VO2max that was obtained at PRTK1 after antropometric measurements was completed. Following to this process, treadmill speed were increased to predetermined speed in 30-45 and continued until the individual exhausted and met the test termination criteria. At the end of the both tests, VO2max, HR, RER and test duration values were recorded. For the analysis of the data independent samples t-test was used and significance level was set to p<0,05.

RESULTS: According to results of the analysis done, PRTK1 was found to be significantly different in terms of VO2max, HR and test durations in favor of PRTK2. (VO2max: 53,94±5,46 ml/kg/min, 56,93±6,55 ml/kg/min; HR: 185,99±6,44 beat/min, 189,39±6,16 beat/min; test duration: 756,67±81,49 sec., 334,19±119,13 sec., respectively, p<0,05). There were no significant difference between PRTK1 and PRTK2 in terms of body mass and %body fat recorded before each tests (p>0,05). CONCLUSION: It could be speculated that since there were no significant differences between body mass measured before each test differences occurred in VO2max between two protocols could not be body mass related. HR values assessed during PRTK2 protocol was found to be significantly higher compared to HR values in PRTK1. Higher HR causes higher cardiac output and thus an increment may occur in oxygen rate that are released to cells at a given time. Similarly, McCole et al. found that cardiac output and stroke volume significantly higher in 6 minutes protocol compared with 12 minutes protocol. We may consider that the difference occurred in our study, may be due to the effect of abrupt increase in speed in PRTK2 with short duration on cardiac output.

These findings may make us think that test protocols with short duration are more effective and time

<sup>&</sup>lt;sup>1</sup> Mersin University School of Physical Education and Sports

saving in determining VO2max.

**Keywords: Cardiac Output, Treadmill Protocols, VO2Max** 

### OP. 627 THE RELATIONSHIP BETWEEN RED BLOOD CELL DISTRIBUTION WIDTH AND VO2MAX IN ATHLETES

### Ayhan Taner Erdoğan<sup>1</sup>

<sup>1</sup> Mersin University School of Physical Education and Sports

#### Abstract

PURPOSE: Red Blood Cell Distribution Width expresses the variation in distribution of erythrocyte size. In normal conditions, erythrocyte size can vary. As microcytes and macrocyte distribution vary in blood stream RDW values become higher. In addition, as number of normocyte raises RDW values lay between reference values. Since oxygen carrying capacity is directly related to erythrocyte, hemoglobin and iron, it can be speculated that RDW can also indirectly explains part of oxygen carrying capacity and can be related to VO2max. The purpose of this study was to investigate the relationship between RDW in reference ranges and VO2max.

METHOD: Total of 13 athletes ages ranged from 17 to 33 years (23,54±4,54 year) participated in the study (height: 180,46±5,55cm; weight; 72,05±7,90kg; Hgb: 15,05±0,91g/dL; Hct: 43,41±2,66%; RDW:13,17±0,40%). On the test day, blood sample were drawn from subjects for RDW analysis before the test. On the visit to the laboratory, height and weight are measured to assess anthropometric measurements.

Subjects warmed up at a given speed for 3 minutes for the determination of VO2max and after that standard Bruce protocol was applied. Expired gases were collected using indirect calorimetry and VO2max were determined by averaging the data for every 10 seconds. Test was terminated when at least two of the VO2max criteria were met (when there was a increase in VO2 more than 2,1ml/kg/dk between two consecutive stages; when RER is above 1,15 and in the case of reaching estimated Maximum Heart Rate (220-age)  $\pm 10$  beat/min)

Data were analyzed using Pearson's moment correlation coefficient analysis and significance was set to p<0,05.

RESULTS: As a result of analysis done there was no significant relationship between RDW and VO2max values (r=0,11, p>0,05).

CONCLUSION: It was thought that since RDW includes hemoglobin which is one of the oxygen carrying blood parameter, it may have effect on VO2max value. However, it could be thought that since RDW values were distributed in a very narrow range this could be the reason why there was not any correlation. We can speculate that if the sedantary individuals or subjects with low RDW values were included in the study as a control group, the difference could be clearer.

Keywords: Athletes, Red Blood Cell Distribution Width, VO2Max

## OP. 660 LOWER EXTREMITY ISOKINETIC STRENGTH IN WEIGHTLIFTERS, SOCCER AND BASKETBALL PLAYERS: RELATIONSHIP BETWEEN CONCENTRIC LEG STRENGTH AND ANAEROBIC POWER

### Sultan Harbili<sup>1</sup>

<sup>1</sup> Selçuk University School of Physical Education and Sports

#### Abstract

**Purpose:** The purpose of the study was to examine and compare isokinetic concentric leg strength and the relationships between leg strength and anaerobic power in different sports. Ten weightlifters, nineteen soccer and twelve basketball players participated in the study.

Methods: Twelve basketball and nineteen soccer players, and ten weightlifters participated in the

study. Concentric peak torque of hamstring (H) and quadriceps (Q) muscles of the dominant and non-dominant leg was evaluated using Cybex NORM (CSMI, Stoughton, Massachusetts, USA) at angular velocities of 60 and 240 °·s<sup>-1</sup>. The subjects performed Wingate Anaerobic Test (WAnT) applied to 75 g workload per body weight 48 h after isokinetic strength measurements.

Results: Normalized peak torque (NormPT) of the hamstrings of D in soccer players was significantly greater than in basketball players and weightlifters at 60 and 240 °·s<sup>-1</sup> (p<0.05). At 60 °·s<sup>-1</sup>, weightlifters presented a greater NormPT of the quadriceps when compared to soccer players in D (p<0.05). Soccer players showed significantly greater H/Q ratio than basketball players and weightlifters for D at 60 °·s<sup>-1</sup> and for both legs at 240 °·s<sup>-1</sup>. In terms of the relationship between isokinetic peak torque and WAnT's anaerobic power outputs, high positive correlations were observed between NormPT of the quadriceps muscles of both legs and normalized peak power (NormPP) and normalized mean power (NormMP) at 60 and 240 °·s<sup>-1</sup> in basketball (r=0.583 to 0.781, p<0.05). In soccer, moderate positive correlations were found between NormPT of the hamstring and quadriceps muscles of both legs and the NormPP and NormMP values at 240 °·s<sup>-1</sup> (r=0.515 to 0.733, p<0.05). In weightlifting, high negative correlation was found between NormPT of the hamstring muscles of ND and fatigue index at 60 °·s<sup>-1</sup> (r=-0.836, p<0.05). According to the correlation results, it was found that, independently form the angular velocity, WAnT's anaerobic power outputs correlated with the quadriceps muscles in basketball players, and, in soccer players, that WAnT's anaerobic power outputs correlated with the hamstring and quadriceps muscles at high angular velocity.

**Conclusion:** Results showed that quadriceps muscle strength played a decisive role in sports as weightlifting which requires lifting weights, and basketball which requires jumping, and that hamstring muscle strength in sports as soccer which requires fast movements like sprint.

Keywords: Wingate Test, Angular Velocity, Dominant Leg, Non-dominant Leg

### OP. 661 ANALYSING OF RELATIONSHIP BETWEEN APELIN AND RUNNING PERFORMANCES OF SHORT, MIDDLE AND LONG DISTANCE ELITE MALE RUNNERS

Hüseyin Nasip Özaltaş<sup>1</sup>, Cengiz Arslan<sup>2</sup>, Faruk Akçınar<sup>3</sup>, İbrahim Kaplan<sup>4</sup>, İsmail Yıldız<sup>4</sup>

### Abstract

**Purpose**: This study has been done to observe short, middle and long distance runners post akute training performance values, analyze paramedical changes at apelin, glucose, insulin levels, hematologic and biochemical parameters and try to reveal the relation between apelin and those parameters.

**Method:**10 short distance runners, 10 middle distance runners and 10 long distance runners -in all, 30 active athletes in Diyarbakır, Elazığ, Mardin and Muş cities- participated into the study. This runners were aged between 18 and 22. Short distance runners run 100 meters, middle distance runners run 1500 meters and long distance runners run 3000 meters. Pre and post training blood samples were taken from all runners in order to find out apelin, glucose, insulin, hematologic and biochemical parameter level of runners. Runners' body composition, aerobic and anaerobic power values has been observed as well. SPSS 21.0 Statistical program has been used to analyze the data and p<0.05 was determined as the meaningful value for the study.

**Findings:** A meaningful difference has been observed between BMI, aerobic power, top power, relative top power, average power and exhaustion index values (p<0.05). An increase has been observed among short and middle distance runners (p<0.05), such an increase hasn't observed among

<sup>&</sup>lt;sup>1</sup> İnönü Elementary School Teacher of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Firat University Faculty of Sport Sciences

<sup>&</sup>lt;sup>3</sup> İnönü University School of Physical Education and Sports

<sup>&</sup>lt;sup>4</sup> Dicle University Faculty of Medicine

long distance runners when it comes to take apelin values into consideration. Glucose values of all runners were seen as increased (p<0.05), while their insulin values were seen as decreased (p<0.05). Some differences have been observed at hematologic and biochemical parameters of all runners, too (p<0.05). Although, no meaningful relation has been determined between apelin values and descriptive statistics, biochemical parameters, glucose and insulin values of all runners who are participated into the study, significant relation has been determined between apelin value and hematologic parameters.

**Conclusion:** In conclusion, by considering the positive meaningful differences at apelin values of short and middle distance runners and absence of any meaningful value for his this criteria among long distance runners has shown that anaerobically qualified trainings have much more influence on apelin. Relatively, much more studies are needed to be carried out to show the relation between apelin hormone and training.

Keywords: Runners, Apelin, Hematologic And Biochemical Parameters

### OP. 665 RELATIONSHIP BETWEEN ISOKINETIC LEG STRENGTH AND KINEMATICS OF THE SNATCH LIFT IN ELITE MALE ADOLESCENT WEIGHTLIFTERS

Erbil Harbili<sup>1</sup>, Sultan Harbili<sup>1</sup>

### **Abstract**

**Purpose:** In the study, the relationships between concentric strength of the hamstring and quadriceps muscles of the knee joint in different angular velocity and linear kinematics of the barbell, the angular kinematics of the lower limb, and the mechanical work and power output during the first and second pull of the snatch lift was investigated in elite male adolescent weightlifters.

**Methods:** Nine male youth national weightlifters (age:16.4±0.73 years) participated in the study. The heaviest snatch lift of the weightlifters was recorded using 2 cameras (PAL) in competition condition. Points on the barbell and body were manually digitized by using Ariel Performance Analysis System (APAS, San Diego, USA). The mechanical work done on the barbell and power output was calculated. Concentric peak torque of hamstring (H) and quadriceps (Q) muscles of the dominant (D) and non-dominant (ND) leg was evaluated using CYBEX NORM at angular velocities of 30, 60, 90, 120 and 180 °·s<sup>-1</sup> after 48 h from maximal snatch lifts. The relationships between kinematic variables and isokinetic strength values were evaluated using Pearson correlation matrix.

**Results:** Significant correlations were found between concentric peak torque of H and Q muscles and the mechanical work done during the first pull both in D leg (r=0.81, p<0.01; r=0.71, p<0.05, respectively) and in ND leg (r=0.68, p<0.05, r=0.74, p<0.05, respectively). At angular velocity of  $120 \, ^{\circ} \cdot s^{-1}$ , significant correlations were observed between concentric peak torque of H and Q muscles in ND leg and the angular velocity of the hip joint (r=0.77, p<0.05), and the vertical velocity of the barbell during the second pull (r=-0.69, p<0.05). At angular velocity of  $180 \, ^{\circ} \cdot s^{-1}$ , there were significant correlations between concentric peak torque of H muscles in ND leg and the vertical velocity of the barbell (r=0.81, p<0.01), and the angular velocity of the hip joint (r=0.72, p<0.05) during the second pull, and between concentric peak torque of Q muscles in ND leg and the angular velocity of the knee (r=-0.67, p<0.05) and the hip joint (r=0.72, p<0.05) during the second pull.

**Conclusion**: In adolescent male weightlifters, concentric H and Q muscles strength produced by both legs at angular velocity of 90  $^{\circ}$ -s<sup>-1</sup> was observed to be effective on the dynamics of the first pull during the snatch lift, and when the angular velocity increased 120 and 180  $^{\circ}$ -s<sup>-1</sup>, concentric H and Q muscles strength produced by ND leg was demonstrated to be effective on the dynamics of the second pull of the snatch lift.

Keywords: Wingate Test, Angular Velocity, Dominant Leg, Non-dominant Leg

<sup>&</sup>lt;sup>1</sup> Selçuk University School of Physical Education and Sports

### OP. 674 EFFECTS OF ELECTROMYOSTIMULATION TRAINING TO THE MUSCLE STRENGTH, SPRINT AND BALANCE

Mehmet Kale<sup>1</sup>, Barış Gürol <sup>1</sup>

#### **Abstract**

**PURPOSE:** The purpose of this study was to investigate of electromyostimulation training effects to the muscle strength and balance. Twenty-three men football players voluntary participated to the study. **METHODS:** Participants were divided to electromyostimulation training group (EAG) (n=10) (age: 20.2±2.1year, body height: 173.6±6.1cm, body weight: 65.0±5.6kg, training age: 98.4±32.4month) and normal training group (NAG) (n=13) (age: 21.9±0.3year, body height: 177.2±5.4cm, body weight: 69.9±7.1kg, training age: 84.9±22.7month). EAG training were 6 weeks, 3 times a week, and 20min a day. Each group continued to their regular training. Somatotype, squat jump and countermovement jumps, 10m, 20m, and 30m sprints, peak torques of knee extensor and flexor muscles at different angular velocities (60, 180, and 300°s<sup>-1</sup>), right leg and left leg kinaesthetic balances were tested. Pre and -post training effects for each group were analysed statistically with Wilcoxon paired two-sampled test.

**RESULTS:** There were significant differences between pre and -post tests for EAG in total body fat percent, right leg fat, left leg fat percent, left leg fat weight, and total body weight (Z= -2.199, -2.142, -2.299, -2.082, -2.142; p<0.05, respectively), in 10m, 20m and 30m (Z= -2.712; p<0.01, Z= -2.199, -2.096; p<0.05, respectively). There were significant differences in right extension peak torque, right flexion peak torque, left extension peak torque, and left flexion peak torque between pre and -post tests for NAG. There were significant differences between pre and -post tests for EAG in right front-back balance rate (Z=-2.497; p<0.05), for NAG in right-front balance point, right-back balance point, and right front-back balance rate (Z= -2.510, -2.589, -2.040; p<0.05, respectively).

**CONCLUSION:** In conclusion, EMS training additional to regular training in competition phase had no effect to the isokinetic strength and kinaesthetic balance parameters but it increased sprint velocity. Regular training additional to regular training in competition phase increased isokinetic strength.

Keywords: Electromyostimulation Training, Squat Jump, Countermovement Jump, Isokinetic Strength, Kinaesthetic Balance

### OP. 688 EFFECTS OF COLD AMBIENT ON SELF-SELECTED CADENCE AND EFFICIENCY

Yasin Yüzbaşıoğlu<sup>1</sup>, Görkem Aybars Balcı<sup>1</sup>, Muzaffer Çolakoğlu<sup>1</sup>

#### **Abstract**

**PURPOSE:** Efficiency is one of the most important factors for better performance at long-duration endurance exercises. When higher velocities are used to yield identical work, motor-units recruitment and core temperature ( $T_{core}$ ) may affect muscular efficiency (ME). Present study is the first research to evaluate relationship between pedal rates (cadence)-ME- $T_{core}$ . The aim of present study was to observe the effects of cold environment on self-selected cadence and ME.

**METHOD:** 10 male moderately trained cyclists and triathletes volunteered for this study ( $VO_{2max}$ 

 $57.3\pm4.2~\mathrm{mL\cdot min^{-1}\cdot kg^{-1}}$ ). Following familiarization session, athletes performed submaximal and maximal aerobic power tests and then, three constant-load submaximal time trials continuing 20 minutes were conducted at wattages corresponding to 60% of  $\mathrm{VO}_{2\mathrm{max}}$  by using electromagnetically braked cycle ergometer in a climatic chamber. The submaximal time trails consisted of i) normal ambient-self cadence ( $\mathrm{N}_{self}$ ,  $20\pm0.5^{\circ}\mathrm{C}$ ,  $60\pm5^{\circ}\mathrm{RH}$ ), ii) cold ambient-self cadence ( $\mathrm{C}_{self}$ ,  $8.0\pm0.5^{\circ}\mathrm{C}$ ,

<sup>&</sup>lt;sup>1</sup> Anadolu University Faculty of Sport Sciences

<sup>&</sup>lt;sup>1</sup> Ege University School of Physical Education and Sports

60±5%RH) and iii) cold ambient-individually fixed to cadence used at N<sub>self</sub> (C<sub>fixed</sub>, 8±0.5°C, 60±5%RH) were conducted with one day intervals. ME was calculated by external power output (wattages) and the formula of metabolic power described by Garby and Astrup (1987). Skin temperature (T<sub>skin</sub>) was measured by thermal camera while T<sub>core</sub> was recorded the ingestible core temperature sensor. Ambient temperature, humidity, oxygen and carbon-dioxide were automatically under-control by climatic chamber. While differences between mean values were analyzed by paired samples t-test, relations were calculated by using bivariate correlation and linear regression methods. SPSS was used for the statistical analyses and p≤0.05 was considered as a significancy level.

### **RESULTS:**

- i. In N\_{self} condition cadence 97.8 $\pm$ 10.4 rpm, ME %18.8 $\pm$ 0.2, T\_{core} 37.7 $\pm$ 0.3 °C and T\_{body} 30.7 $\pm$ 0.6 °C were measured.
- ii. When compared to  $N_{self}$  condition,  $T_{skin}$  and ME, respectively, were decreased to %17.6±0.2 (p=0.003) and 26.6±1.5 °C (p=0.000) but no change was found in  $T_{core}$  (37.8±0.3 °C; p=0.692) in  $C_{fixed}$  condition.
- iii. When compared to  $C_{fixed}$  condition, cadence,  $T_{core}$ ,  $T_{skin}$  and ME, respectively, were increased to  $104.4\pm10.6$  rpm (p=0.003),  $38.0\pm0.3$  °C (p=0.005),  $27.4\pm1.6$  °C (p=0.000) and % $18.4\pm0.2$  (p=0.021) in  $C_{self}$  condition.
- iv. When compared to  $N_{self}$  condition, cadence,  $T_{core}$ , respectively, were increased to  $104.4\pm10.6$  rpm (p=0.003) and  $38.0\pm0.3$  °C (p=0.005),  $T_{skin}$  was decreased to  $27.4\pm1.6$  °C (p=0.000) but no change was detected in ME (%18.4±0.2; p=0.319) in  $C_{self}$  condition.
- v. A statistically significant high-level negative relationship was found between ME and cadence in  $N_{self}$  condition [r(10) = -0.819; r = 0.004]. Result of the regression analysis (F[1. 8] = 16.3, p = 0.004,
- $R^2 = 0.671$ ) revealed that cadence explained the 67.1% of the variance in ME; ME = 31.41+ (-0.13 × cadence).

**CONCLUSION:** The cold ambient may decrease ME independently cadence. When self-cadence in cold ambient allows, increased cadence may positively affect the ME.  $T_{core}$  may also have a little contribution to increase ME besides accelerated cadence.

Keywords: Cold, Gross Muscular Efficiency, Pedal Rate, Performance

## OP. 708 BIOMECHANICAL CHARACTERISTICS OF FORWARD AND BACKWARD GIANT CIRCLES ON HIGH BAR

Nihat Özgören<sup>1</sup>, Serdar Arıtan <sup>1</sup>

### **Abstract**

**Aim**: In this study, the kinematic and kinetic characteristics of backward and forward giant circle on high bar were investigated by utilizing a mechanical model.

**Method:** Five former national gymnasts were voluntarily participated into this study as subjects by performing backward and forward giant circles on high bar. The performances were recorded by using a high speed camera that can video record at a speed of 500 frames per second. In order to identify body segments and joints on the images, reflective markers were placed on each joint of interest. Position of the points were obtained by digitizing the recorded video images. All digitising was carried out with the HUBAG Three Dimensional Movement Analysis Software. Digitized data was smoothed by local regression using weighted linear least squares and a 2nd degree polynomial model. The span of the method was set to 0.1. Body segments were defined from smoothed position data of the points. Joint and segment angles, angular velocities and angular accelerations were calculated. In order to create body geometry, segment lengths and segment circumferences of the subjects were measured. Segment masses and mass centres were calculated by using Dempster's body segment parameters and

<sup>&</sup>lt;sup>1</sup> Hacettepe University Faculty of Sport Sciences

the anthropometric data of the subjects. In the study, a seven segment mechanical model of a gymnast was utilized. This model was built using SimMechanics (version 4.4) (Mathworks Inc. Natick, MA, USA) libraries in SIMULINK (version 8.3). The model was driven using kinematics of the joints. Joint torques were calculated from the simulation model using the method of inverse dynamics. Kinetic and kinematic characteristics of backward and forward giant circles were interpreted by comparing each other.

Results: All of the subjects were performed complete giant circles by rotating through the angle of 360° around the bar. Forward and backward giant circles are completed in 1.55 and 1.43 seconds, respectively. A flexion occurs at the neck joint during the first two phases of the giant circles and it is followed by a hyperextension during the last two phases. While the highest angular changes are seen at the hip and shoulder joints, there is no angular action at the ankle and elbow joints during the giant circles. Regarding the angular actions of the hip and shoulder joints, giant circles can be investigated in four phases. These phases are named Preparation, Elongation, Contraction and Initialization. The knee joint flexes around 22° during the Elongation phase, while the gymnast passes through the lower part of the circles. At the contraction phase of the movements, gymnast performs flexion and extension action at both the hip and shoulder joints. Thus the distance between body's centre of mass and the bar is minimum at this phase. The flexion action at the hip joint occurs in the direction of body rotation during the backward giant circle whereas the hip flexion occurs in the opposite direction of body rotation during the forward giant circle. Therefore gymnast's rotation speed is lower and conter of mass is nearer to the bar during the forward giant circle. The angular accelerations of the shoulder and hip joints are highest during the contraction phase and the greatest joint torques are achieved in this phase of the movements. Maximum torque is acting on the wrist joint during the contraction phase of the movements, -2675 Nm and 2205 Nm in the backward and forward giant circle, respectively.

**Conclusion:** It is found that the angular velocity of the body's center of mass is higher in the backward giant circle, thus it is completed faster than forward giant circle. Head and lower leg segments were neglected in the previously designed mechanical models for similar analysis of the backward giant circle. In this study, it is found that dynamics of both forward and backward giant circles is affected by the angular kinematics of head and lower leg segments.

Keywords: High Bar, Backward Giant Circle, Forward Giant Circle, Dynamic Model, Simmechanics

### OP. 712 THE EFFECTS OF TWO-WEEK ANAEROBIC TRAINING ON VO₂MAX

### Zübeyde Aslankeser<sup>1</sup>

<sup>1</sup> Selçuk University School of School of Physical Education and Sports

#### Abstract

There are reports in the literature that sprint interval training may increase the aerobic capacity in addition to anaerobic performance. Our aim was to examine the effects of high intensity interval anaerobic training(Wingate loads) on maximal oxygen consumption(VO<sub>2max</sub>)and anaerobic power. Sixteen women performed VO<sub>2max</sub> test and wingate anaerobic test before and after the training. VO<sub>2max</sub> was measured by K4 b<sup>2</sup> using cycle ergometer begin with 50 W load and increased 25 W every 3 min untill exhaution. The training group (n=8, 21,1±3,2 year, 62,2±3,1kg) performed 2 wk high intensity anaerobic training. Each training load contained two wingate anaerobic tests with 5 min rest. The control group(n=8, 22,2±2,4 year, 61,5±2,6 kg)did'nt any exercise during 2 wk. Changes in VO<sub>2max</sub> and anaerobic power were tested by a two-way ANOVA for repeated measurements with group(training vs control)and time(pre vs post training) as factors. High intensity anaerobic training loads increased anaerobic power and VO<sub>2max</sub> in training group(p<0,05). Although the training loads were extremely brief in this study aerobic and anaerobic power were increased significantly. The brief but intense interval training can result anaerobic and aerobic performance in an increase glycolytic and oxidative muscle enzymes activity in short training time.

Key Words: Wingate anaerobic power, VO<sub>2max</sub>, Interval training

### OP. 58 AN EXAMINATION OF THE CLASSROOM TEACHERS' ATTITUDES AND SELF-EFFICACY PERCEPTIONS TOWARDS PHYSICAL EDUCATION COURSE

Sonnur Küçük Kılıç<sup>1</sup>, İbrahim Aydın<sup>2</sup>, Erman Öncü<sup>1</sup>, H.Mehmet Tunçkol<sup>1</sup>

### **Abstract**

**Objective:** The purpose of this study was to examine classroom teachers' attitudes and self-efficacy perceptions towards physical education course according to some demographic variables (gender and age), and to determine the relationship between attitude and self-efficacy perception.

Method: The study was based on a descriptive research model. The model was conducted on 252 classroom teachers (97 female and 155 male) who worked in the public schools under the National Department of Education in Giresun in 2013-2014 Spring Semester. The ages of the participants ranged between 31 and 59 (M=50.77±5.50) and their years of experience in the profession ranged between 10 and 38 (M=28.03±6.86). In the study, The Physical Education Attitude Scale (PEAS) and the Physical Education Self-Efficacy Scale (PESES) were administered on the participants as data collection tools. The PEAS was developed by Yıldız (2010) in order to measure the attitudes of classroom teachers towards physical education course. The scale was consisted of 23 items and all items were measured and sorted by using a five-point Likert scale. Cronbach Alpha reliability coefficient was determined as 0.83 for this study. The PESES was developed by Ipek and Bayraktar (2009) in order to determine the self-efficacy beliefs of preservice classroom teachers about physical education course. The scale was consisted of 10 items and all items were measured and sorted by using a five-point Likert scale Cronbach Alpha reliability coefficient was determined as 0.96 for this study. Descriptive statistics were performed on all variables including means, standard deviations and Skewness and Kurtosis coefficients. T test, correlation analysis and regression analysis were used in the data analysis. Cronbach's alphas were calculated for the scales in order to evaluate their internal consistency.

**Results:** The mean of the PEAS and the PESES scores of the classroom teachers who participated in this study were 3.93 and 3.62 respectively. Whereas the participants' PEAS scores did not differ significantly (t=0.64; p=0.53), there was a significant difference in the scores of the participants' self-efficacy in respect to gender variable (t=2.09; p=0.04). According to this result, the male classroom teachers' average scores (3.94) were higher than the female classroom teachers' scores (3.90). There was a significant difference in the scores of the participants of EAS (t=2.34; p=0.02). The average scores of the participants of 51 ages and over (3.99) were higher than the scores of the participants of 50 ages and under (3.84). There was also a significant difference in the scores of the participants' PESES (t=5.48; p=0.00). The average scores of the participants of 51 ages and over (3.94) were higher than the scores of the participants of 50 ages and under (3.24). According to the regression analysis, 4% of the variance in attitudes and 7% of the variance in self-efficacy towards physical education course was predicted from the years of experience of the participants. The results of the correlation analysis showed that the participants' scores of the attitudes and the self-efficacy were not related to each other (r=-0.11; p=0.09).

Conclusion: Both attitudes and self-efficacy perceptions of the participants towards physical education course were above the middle level. The classroom teachers' attitudes towards physical education course did not differ in according to gender. The male classroom teachers had higher self-efficacy scores. The participants who were 51 years old or older had more positive attitude and higher self-efficacy beliefs about physical education course. Additionally, our findings demonstrated that the classroom teachers' years of experience have important effects on determining their attitudes and self-efficacy perceptions about physical education course. This study had its limitations in terms of its sample characteristics and target sample. The sample of this study were chosen from experienced classroom teachers only from one city. In order to overcome these limitations, it is suggested that the future studies include differentiated samples.

Keywords: Classroom Teacher, Physical Education Course, Attitude, Self-Efficacy

<sup>&</sup>lt;sup>1</sup> Karadeniz Technical University School of Physical Education and Sport

<sup>&</sup>lt;sup>2</sup> Giresun Çanakçı Primary School

# OP. 65 THE ANALYSIS OF LIKING OF CHILDREN AND EMOTIONAL INTELLIGENCE IN TERMS OF CERTAIN VARIABLES FOR CANDIDATE TEACHERS OF PHYSICAL EDUCATION

Zekai Pehlivan<sup>1</sup>, Özlem Alavlı<sup>1</sup>, Elif Nilay Ada<sup>1</sup>, Fatma Çepikkurt<sup>1</sup>

#### Abstract

**Objective:** The main objective of this study is to analyze the level of liking of children and emotional intelligence of teacher candidates of pyhsical education in accordance with the variables such as sex, age and the number of siblings.

**Method:** The sample group of this study consists of 244 teacher candidate of physical education in total (Man=128, 52,5%; Women=116, 47,5%) including first to final (1<sup>st</sup>-4<sup>th</sup>) year students of Physical Education Teaching Department of three different universities. The average age of the participants is 21.19 and standard deviation is 2.04. Age interval also changes between 17-32. The level of liking of children is collected with "Barnett's Liking of Children Scale" that is developed as one dimensional and 7-point Likert Scale, and the characteristics of emotional intelligence is collected with "Emotional Intelligence Questionnaire Scale – Short Form (EIQue- SF) consisting of certain subdimensions such as "well-being", "self-control", "emotionality" and " sociability". Descriptive statistics are used for data analysis while t and F tests are used for the significance of difference between the groups, and Bivariate Pearson Correlations (r) technique is used for the correlation between independent variables. Magrin of error is at a level of 0.05.

**Results:** As a resul of the analysis and considering the total points, no significant difference is found between the liking of children and EIQue- SF (p>0.05). However for sex, there is a significant difference in sub-dimensions of "self-control" and "sociability" of EIQue-SF (p<0.05). In these two sub-dimensions, men receive higher points than women. For the number of siblings variable, the ones having 0-3 siblings receive significantly higher points from "Emotional Intelligence Questionnaire Scale – Short Form (EIQue-SF) than the ones having 4-6 siblings (p<0.05). Yet the ones having 7 or more siblings receive higher points from "Emotional Intelligence Questionnaire Scale" than the ones having 4-6 siblings (p<0.05). Additionally, there is a possitive correlation between the liking of children points and EIQue points (r= .177, p<0.01).

**Conclusion:** Considering emotional intelligence features, male participants show higher self-control and sociability than female participants. The participants with less number of siblings have higher points of liking of children and emotional intelligence. Emotional intelligence points increase in parallel with the liking of children points

Keywords: Liking of Children, Emotional Intelligence, Teacher Candidate of Physical Education

### OP. 106 ATTITUDES AND THOUGHTS OF THE STUDENTS AT THE DEPARTMENT OF PHYSICAL EDUCATION AND SPORTS TO THE USE OF TECHNOLOGY

Kurtuluş Özlü<sup>1</sup>, Şule Kırbaş<sup>2</sup>, Sebiha Gölünük<sup>3</sup>

- <sup>1</sup> Amasya University Institute of Social Sciences Teaching of Physical Education and Sports
- <sup>2</sup> Amasya University Faculty of Education Teaching of Physical and Sports
- <sup>3</sup> Afyon Kocatepe University Faculty of Education Teaching of Physical and Sports

#### Abstract

The mankind who thinks and is in the need of learning always tries to improve and share what he has learned with others. The technology which is needed for flow of information is the most rapidly developing area in modern life. In this study it is aimed to determine the attitudes and thoughts of the students attending Physical Education and Sports Department at university about using technological

<sup>&</sup>lt;sup>1</sup> Mersin University School of Physical Education and Sport

for educational appliances. As the means of research a survey composed of two parts was applied. The first part consists of 16 items about students' personal information and the second part consists of 5 factors and 19 items which is "the scale of attitudes towards technology" developed by Yavuz (2005). This survey way applied to 11 female 19 male first grade students, 13 female 18 male second grade students, 14 female 26 male third grade students and 14 female 19 male fourth grade students in total 134 students from the department of Physical Education and Sports at Amasya University and 13 female 14 male first grade students, 7 female 14 male second grade students, 23 female 23 male third grade students and 15 female 13 male fourth grade students; in total 122 students from the department of Physical Education and Sports at Afyon Kocatepe University(final total:110 female, 146 male, 256 students). The answers to survey were evaluated using SPSS programme and simple T-Test, Annova and descriptive analysis was used for resolution. The answers of the students and their personal information about the universities and grades they are attending, their genders, sports branches, ages, hometowns, domains, the high schools they graduated from, their parents' professions, the level of foreign languages they know, whether they have a computer or not were all examined and no significant difference has conducted. Though it seems there are some positive differences among whether having attended to computer lessons, or participating in the technology-assisted education seminars or not these differences are not statistically significant. In general, the students attitudes towards the use of technology were evaluated out of five, the result was 3.71. Up to this result it can be easily said the students' attitudes toward technology are positively high. To sum up, in globalizing world the use of technology is rapidly changing and is updated. People slog on keeping pace with this development and mostly they can't deal with it. The most important factor which will let the students cope with this development is the instructors and the teachers. Therefore in order to achieve this it is necessary attach a great deal of importance to the technology courses at universities and preparing some technology assisted seminars.

Keywords: Attitudes and Thoughts of the use of Technology, Physical Education

## OP. 121 THE COMPARISON EFFECT OF SUBJECTS ORIENTED AND COACH ORIENTED FEEDBACK ON PERFORMANCE AND LEARNING A MOVEMENT TASK IN CHILDREN

 $\underline{\mathsf{Amir}\;\mathsf{Moghaddam}}^1$ , Javad Fooladian  $^2$ , Vahid Moghaddam  $^3$ , Amin Azimkhani  $^4$ 

### **Abstract**

**Objective:** The aim of this study is to compare the effect of subjects oriented and coach oriented feedback on children performance and learning a movement task.

**Method:** The sample included 45 Right-handed children (with age range of 10-12 years old) that were randomly arranged in three groups: subjects oriented (self-control), coach oriented with 100% frequency and frequency dropped to 50%. The task used in this research was to throw a bean bag of 100 grams with Non-referred hand and closed eyes from a distance of three meters to target which was on the floor with concentric circles. Each subjects in the acquisition phase 10 blocks of six repetitions and after 24 hours Retention gap they did 10 more attempts.

**Results:** Results showed that Acquisition and retention phase between various methods of providing feedback in children was significantly different (p=0.001) in a way that in acquisition phase, coach oriented feedback group (50% and 100%) had better performance than self control feedback and coach oriented 100% to coach oriented 50%. Also in the retention phase coach oriented feedback group (50% and 100%) with self controlled feedback and coach oriented 100% showed better learning than coach oriented 50%.

Conclusions: According to these results we can conclude that children get more benefit from coach

<sup>&</sup>lt;sup>1</sup> Mashhad Branch, Islamic Azad University Department of Physical Education and Sport Sciences

<sup>&</sup>lt;sup>2</sup> Ferdowsi University of Mashhad Department of Physical Education and Sport Sciences

<sup>&</sup>lt;sup>3</sup> Qazvin Branch, Islamic Azad University Department of Physical Education and Sport Sciences

<sup>&</sup>lt;sup>4</sup> Imam Reza International University of Mashhad Physical Education and Sport Sciences

oriented feedback in comparison to self-controlled feedback in acquisition and retention stages. These findings pointed that we cannot generalize the advantages of self controlled feedback from adults to children.

Keywords: Subject Oriented Feedback, Coach Oriented Feedback, Sequence of Feedback, Children

### OP. 139 DETERMINATION OF THE VIEWS OF STUDENT, PARENT AND PHYSICAL EDUCATIONTEACHERS REGARDING TOP CARDS

Zekai Usluoğlu<sup>1</sup>, A. Dilşad Mirzeoğlu<sup>2</sup>

- <sup>1</sup> Bülent Ecevit University Çay Cuma Vocational Schools
- <sup>2</sup> Abant İzzet Baysal University School of Physical Education and Sport

### Abstract

**Objective:** After the educational system change made in Turkey in 2012-2013 school year, physical education and sports curriculum for secondary schools were renewed and guidebook and Turkish version of physical activity cards (TOPs Cards) were presented to the teachers as a guidance. TOPs Cards are one of the most efficient supplementary resources consisting of high quality physical education and activites which have been produced in order to support the students taking teacher education, the teachers working for schools, the trainers working out of schools and other sport trainers working for different channels in the society in England and Scotland. (www.uluslararasiilham.org.tr). New studies have been needed for this change including new application for our country. Thus, the aim of this study was to determine the views of the students, parents and phsical education teachers regarding TOPs Cards used in physical education and sport lessons in secondary schools.

Method: Phenomenological design has been used within this study which is also qualitative. Study has been conducted in three classes of 5, 6, 7th grades in a secondary school situated in Zonguldak province, Gökçebey district through easily accessible sample method. 153 students (77 girls, 76 boys; 31,4% 5th grade, 33,3% 6th grade, 35,5% 7th grade) were included within this study. These students have taken physical education and sports lessons with Turkish version of TOPs Cards (yellow and purple cards) for 2 hours (80 minutes) during 12 weeks. 135 parents of 153 5, 6,7th class students (56% of women, 43,7% of men; 29,7% 5th grade, 34% 6th grade and 36,3% 7th grade) have voluntarily participated in this study. After each lessons, views of two physical education teachers using TOPs Cards in their lessons have been noted regarding TOPs Cards. Both of the physical education teachers were man and had 6 and 8 years of experience. Physical education teachers' dairies consisting of structured questions and questionnaire forms for students and parents generated by the researchers were used for gathering the data. Descriptive and content analysis method related to dairies of pysical education teachers have been utilised to analyse the data. And, percentage and frequency methods have been used for the views of parents and students.

Results: According to student views obtained within the study findings, the great majority of the 5th, 6th and 7th grade students (71,9 %) stated that having a physical education lesson with TOPs Cards created differences in physical education lessons. 68,6 % of the students stated that they enjoyed having a physical education lesson with TOPs Cards and 68% of the students stated that they liked their lessons with them. Additionally, 69,3 % of the students stated that TOPs Cards raised their attendance to lesson and 79,1 % of the students stated that they were beneficial, 68% of the students stated that TOPs Cards improved their movements skills and 74,5 % of the students stated that having a lesson with TOPs Cards provided them to act in collaboration. 61,4 % of the students stated that the usage of TOPs Cards in lessons raised their self-confidence; 61,4 and 81 % of the students respectively stated that TOPs Cards made the lessons enjoyable and they didn't have difficulty in performing these cards. When parent views regarding TOPs Cards are examined, half of the parents (50,4 %) stated that they aware of the methods used in physical education lesson of their children and of TOPs Cards content. More than half of the parents (74,1%) stated that their children talked to them

about physical education and sport lesson in home. 56,3 % of the parents stated that TOPs Cards used in lessons support education and teaching. Additionally, 58,5 % of the parents stated that usage of TOPs Cards in the lessons affected their children's interest in the physical education lesson in a positive way. 60,7% of the parents stated that their children had a strong interest in the sport after TOPs Cards had been used in the lesson. 51,9% of the parents stated that lessons with TOPs Cards contributed to their children's physical development. 43,7% of the parents stated that TOPs Cards provided their children to express themselves better and finally 60 % of the parents stated that they wished that lessons shall continue with the usage of TOPs Cards. To analyse the views of physical education teacher regarding TOPs Cards, teachers stated that most of the cards are suitable to students' level; most of the students can easily understand cards and generally most of the class attend the lesson. Additionally, teachers stated that equipment usage raised, almost all of the students enjoyed in the lesson, almost all of the students attended activities and games both individually and in group, most of the students respected to their friend during the activities and games, they obeyed security precautions, TOPs Cards are easy to develop communication skills, provide socializing and raise success. However, according to the teacher views, some of the disadvantages of implementing the TOPs Cards in the lessons are that students need role models for some cards, students having high skill level come into prominence, the need of suitable physical places, the need of extra equipments, the classroom management problem arising out of the excessive equipments, the necessity of the teachers to be educated about the cards, the rareness of the competitive game contents of the cards.

Conclusions: While secondary school students generally found TOPs Cards enjoyable, attendance improver, socializing provider and instructive: parents stated that TOPs Cards supported physical education, raised the interest of the students towards lesson, created better interest among their children towards physical education and contributed their children's physical development. Physical education teacher found these cards understandable, applicable, success and socializing provider. In terms of application, physical education teacher stated that there are some disadvantages such as physical facilities of the school, education of the teacher, equipment and guidance need.

Keywords: Physical Activity Cards, Physical Education And Sport, Secondary School.

### OP. 192 ATTIDUDES OF PHYSICAL EDUCATION TEACHERS RELATED TO THE EDUCATION PHILOSOPHY PREFENCES AND TECHNOLOGY

Anıl Türkeli<sup>1</sup>, Ömer Şenel <sup>1</sup>

#### Abstract

**Objective:** Within the scope of the research, the attitudes of physical education teachers, in Turkey, towards educational philosophy and technology will be examined. Through the including of physical education teachers in the context of the research, there will be the chance to draw conclusions about the facts how various variables (gender, age, marital status, year of service) affect their attitudes to educational philosophy and technology besides whether there is a significant relationship between the philosophy of education that they adopt and their attitudes toward technology. Although there are many resources about the educational philosophy and attitudes related to technology of teachers in the literature, having quite a few researches on the relationship between philosophy and attitude is conspicuous.

**Method:** In the research, in order to determine gender, age, marital status and year of service independent variable personal information form; which educational philosophy opinion that physical education teachers have "Philosophy Preference Assessment Scale", developed by Willes (1993) and adapted to Turkish by Doğanay and Sarı (2003) as well as what attitudes physical education teachers have to technology" Attitude Toward Technology Scale" designed by Akbaba (2002), were employed. These scales were applied to 91 volunteer physical education teachers, of whom 22 were females and 69 were males, working at all primary and high schools in city centrum and districts under the Erzincan Provincial Directorate of National Education. Philosophy Preference Assessment Scale:

<sup>&</sup>lt;sup>1</sup> Gazi University School of Physical Education and Sports

Wiles and Bondi (1993) 40-item Likert-type scale was developed. Scale before and easy implementation Shepherd (2002) used to determine the preferences of prospective teachers due to philosophical research is used. This scale; Daimic, the Idealist, Realist, experimentalists and existential including 40 items, five subscales and strongly agree (5) from strongly disagree (1) to the right is rated. United States of America's five college graduates and non-total of 5000 students applied to the philosophical preferences evaluation survey, five of educational philosophy for each eight principles, including a total of 40 philosophical principles in a complex manner is located. According to the philosophy of this policy is associated distributions are as follows (Wiles et al., 1993). Scale Attitudes Towards Technology: Technology is the attitude scale Akbaba(2002) developed by Article 37 are five-point Likert-type scale. Technology Adoption (23, 24, 26, 27, 28, 29, 30 numbered compounds), Technology and Development (18, 20, 21, 22, 37 numbered compounds), Technology Review (6, 9, 11, 13, No. 16 substances), Technology and Management (5, 8, 10, 12 numbered items), fear of technology (14, 17, 19, 35 numbered items), Technology and the Internet (15, 25, 32, 36 numbered items), Technology Trust (31, 33, 34 numbered items), Technology and pessimism (1, 3, 7, No. substances), use of technology (2, 4, No. substances) to be consists of nine sizes. In the scale of 1, 3, 5, 7, 10, 12, 14, 17, 19, 21, 24, 26, 27, 28, 30, 32, 35, 36 is scored reverse No. substances. for instance; 'Avoid use of technology in my daily work I' statement, Strongly Agree 5 Agree 4 Undecided 3 Disagree 2 Disagree was scored as 1. Scale scores increased from a positive attitude towards

In a study conducted by vultures reliability of the scale, Cronbach's alpha reliability coefficients were .91. When analysing the data obtained, for the independent variables (gender, age, marital status, year of service) found in the first part of measurement instrument, descriptive statistics calculations were made. In the study, in order to specify whether there was a difference considering the independent variable, Mann Whitney U Test and Kruskal Wallis H Test were performed. In addition, to state level of relationship between educational philosophy and attitudes to technology of physical education teachers, Pearson Correlation Analysis was carried out. The significance level was regard as (p < 0.05) in the study.

**Results:** It was shown that among the 91 teachers who participated in the study the majority was composed by male teachers n=69 (%75.8) and the minority by n=29 (%24.2) female teachers. In terms of age variable, there were 22 teachers in the 21-30 age group (25.0%), 59 teacher in the 31-40 age group and 10 teachers in the 41 and over age group. According to marital status, 71 teachers (%78.0) were married while 20 teachers (%22.0) were found to be single. With respect to year of service variable, it was presented that the number of teachers having service years between 0-5 was 26 (%28.6), between 6-10 was 30 (%33.0), between 11-15 was 24 (26.4%) and between 16 and over was 11(%12.0). In the research, it was concluded that the total and all the sub-dimensions of educational philosophy of physical education teachers did not create significant differences in terms of gender, age, marital status and years of service variables as well as the mean score of attitude towards technology also did not demonstrate a significant difference with respect to gender, age, marital status and year of service variable. Physicaleducationteachers' Educational philosophy and technology-oriented attitude made to determine the level of relationship between the scores Pearson as a result of correlation analysis, philosophy of education preference points (1) and attitude stoward technology scores (0.89) was not statistically correlated with the maintenance between. There was no relationship between attitude stoward physical education and philosophy of education technology preferences of teachers.

**Conclusion:** According to research findings, it was indicated that both females and males physical education teachers mostly had experimentalist philosophy sub-dimension mean score. In other words, the physical education teachers can be said to have adopted experimentalist philosophy of education. In the study, it was determined that both female (=27,59) and male (=26,57) physical education teachers had at most embracement of technology sub-dimension mean score. That is to say, physical education teachers' attitude to technology can be said to have been positive. The total scale and subscale scores between the two correlation analysis found no significant relationship was.

Keywords: Physical Education, Educational Philosophy, Technology

### OP. 197 THE INVESTIGATION OF PHYSCIAL EDUCATION, MUSIC AND ART TEACHERS' COMMUNICATION SKILLS

Özden Tepeköylü Öztürk<sup>1</sup>, Mümine Soytürk <sup>2</sup>

### **Abstract**

Communication between teachers and students created by teacher in classroom affects quality of learning because teaching-learning process is a communication process. Therefore, qualifications of teachers related to communication skills are a factor affecting professional qualifications. In modern education, in addition to knowledge transfer, it is aimed that the individuals acquire skills, develop their interests and abilities, discover their creativities, and to include individuals who are constructive, creative and productive for the society. Thus, this aim could not be performed solely by means of academic courses regardless of physical education, music and art/visual art courses. Because physical education, music and art/visual art are courses mainly supplying physical, mental and emotional development of students. In this context, the level of communication skills of teachers seems more critical. The purpose of the study is to investigate the level of communication skills of physical education, music and art/visual art teachers. In addition the study aims to determine whether communication skills of participants vary according to variables such as branch, gender, educational level of the institution which the participant works, professional seniority level and their willingness to change profession. Participants of the study consisted of 91 (X<sub>age</sub>=42.7) physical education, 35  $(X_{age}=41.9)$  art(visual art and 36  $(X_{age}=36.3)$  music with total of 162  $(X_{age}=41.1)$  teachers who volunteered for the study. Quantitative descriptive techniques are utilized in the research. Communication skills level of the participants is measured by "The Communication Skills Scale" developed by Korkut (1996). Additionally a "Personal Information Form" is utilized in order to collect data related to the demographic information of the sample and independent variables of the study. Ttest and one way ANOVA is utilized for data whose number of observations is n>30 and Krukal Wallis H test is utilized for data whose number of observations is n>30 and not normal distribution. Findings indicate that the mean score of the participants' communication skills is  $(X=4.30\pm0.37)$ . It is also found that the differences according to variables such as branch  $(F_{(2-159)}=.313, p>.05)$ , gender  $(t_{(160)}=.337, p>.05)$ , worked institution's educational level  $(t_{(160)}=3.26, p>.05)$ , professional seniority year  $(F_{(3-158)}=.513, p>.05)$  and change request to profession  $(\chi^2_{(2)}=1.535, p>.05)$  are not significant. The result of the study indicates that communication skills of participants are quite high.

Keywords: Communication Skills, Physical Education, Music, Art, Teacher

# OP. 202 REFLECTION ON A DIDACTIC TRANSPOSITION OF POLE VAULTING: FROM A PERFORMANCE SPORT TO A SCHOOL PRACTICE IN PHYSICAL EDUCATION AND SPORT

<u>Derbalı Chawkı</u><sup>1</sup>, Elloumı Alı <sup>2</sup>

### **Abstract**

**Objective:** The authors attempt the implementation of a didactic transposition applied to the activity of pole vaulting as a practical reference in performance sport. This study draws the theoretical and practical basis proposed in a variety of previous works on the didactic transposition applied to sport for its implementation in physical education. In line with this reference researches, the case of a

<sup>&</sup>lt;sup>1</sup>Pamukkale University School of Sport Sciences and Technology

<sup>&</sup>lt;sup>2</sup> Celal Bayar University School of Physical Education and Sports

<sup>&</sup>lt;sup>1</sup> Virtual University of Tunisia Higher Institute of Education and Continuous Training of Tunis

<sup>&</sup>lt;sup>2</sup> University of Sfax Sociology

didactic transposition for teaching the pole vaulting practice at school is presented. The relationships between teachers and learners of this discipline are also identified.

**Method:** An epistemological analysis of scholarly knowledge of the practice of pole vaulting and transpositive analysis of its implementation have constructed an analysis of actual practices framework. Since our goal incites to better understand reasons of the noosphere actors and those of the literature for the implementation of the practice of pole vaulting in school, we opted for a strategy of an interpretive research focused on content analysis of various documents: a recension of a literature review of 100 scientific works on the practices of the pole vault was conducted, from articles and professional books examined using of a read gate. Then, a collection of designs units curricula differentiated practice characteristics of pole vault with a semi-structured interview with 10 actors of the noosphere by a coding grid.

Finally, the implementation of the practice of pole vault by a cyclical program of 13 sessions in a population of 25 girls and boys aged between 15-18 years and attending a class of sports studies. This allowed to conduct quantitative and qualitative case studies based on professionalism in the activity taught. The students tuck questionnaires measuring physical conditions, motor skills and autonomy support before and after learning the particular practice of pole vaulting and the assessment of the learning evolution by evaluation grids. The survey contained has had descriptive statistical analysis of the measured data, Spearman correlational analyzes on the effects of learning and multivariate analyzes of variance and post-hoc tests (Tukey HSD test) examining the sex and age effect on the practice of pole vaulting.

**Results:** The potential curriculum from a review of the literature about the practice of pole vaulting accurate factors of performance 57%, of didactic transposition APS 31% and of initiation in the pole vault 12%. The designs of the noosphere actors subconsciously induce the type of programming offered through three key issues namely: representations related to APS, the type of developed programming and the implementation of the practice of pole vault at schools. The text segments curriculum with  $(X^2 > 11)$  are considered. By studying the relationship between the level of dimensions of physical conditions, motor competence and support of autonomy in relation to learning the pole vault, we have found that by age 15-16 years, the correlation was highly significant between performance and respectively coordination and physical condition (r = 0.61, p < 0.001 and r = 0.74, p <0.001). While no effect of physical appearance on the performance in the pole vault showing a nonsignificant correlation equally in both genres boys and girls (r = 0.11, r = 0.16). The study population shows no significant difference in age, F (1,13) = 0.45; p <.71; and gender did not appear as a discriminating factor in relation to the dependent variables of the physical condition, F(6,11) = 2.15, p <0.23. So overall, the six dimensions of physical conditions (coordination, strength, flexibility, speed, endurance and physical appearance), motor competence, and support of autonomy are correlated with performance in the pole vault (r ranged between 0.29 and 0.65, p < 0.05).

Conclusions: The analysis of the potential curriculum and reasons of the noosphere actors about practicing pole vaulting has emphasized analytical, comprehensive, integrated and adapted to the generic lessons trends. This allowed Analytical, global and generic trends of adapted and integrated learning. Therefore the reports of crossing and separation between the practice of pole vaulting, the learned knowledge and the learner's skills were highlighted. The effects related to contextual factors were identified. The training analysis led to propose practical teaching programs for pole vaulting at schools.

Keywords: Didactic Transposition, Pole Vaulting, Physical Education, Learned Knowledge, Learn to Teach

# OP. 204 THE INVESTIGATION OF THE PHYSICAL EDUCATION SENIOR TEACHER CANDIDATES' ATTITUDES DIRECTED TO THE PROFESSION IN TERMS OF SOME VARIABLES

<u>Başak Eroğlu</u>  $^1$ , Umut Sonbahar  $^1$ , Arif Kaan Eroğlu  $^2$ 

### **Abstract**

**Objective:** In this study, physical education and sport senior teacher candidates' attitudes directed on the profession were investigated to determine that differences according to gender, graduated high school, parents' education status, whether a person with profession of teaching they had in their family, reason of choosing occupation, habit of regularly perform exercise, satisfaciation with their department and academic achievement.

**Method:** Physical education and sport senior students who are attending in Yüzüncü Yıl University have participated in this investigation in 2013-2014 academic year. This survey model study has been conducted to 47 teacher candidates. The data of the investigation has been collected with "Attitude Scale On Teaching" and the academic achievement scores of the teacher candidates have been gathered from the Registrar's office at the college of physical education and sports. Some demographic variables about were gained by using "Personal Information Form". In the analysis of the data, arithmetic mean, standard deviation, coefficient of correlation, tukey multiple-comparisons, ANOVA, and T test have been used.

**Results:** The result of this analysis shows that attitudes directed on the profession of senior students were positive for each gender. There is no significant differences in the candidates' levels of attitudes directed on the profession and academic achievement according to their each gender, graduated high school, parents' educational status, whether a person with profession of teaching they had in their family, reason of choosing occupation, and habit of regularly perform exercise (p>0.05). The attitude levels of the candidates who are satisfied with the physical and sports department (4.064) higher meaningfully than non-satisfied (3.552) (p<0.05). There is no statistically significant correlation between candidates' attitudes level and academic achievement; nevertheless, they had a low correlation level and positive way (pearson correlation 0.102).

**Conclusions:** The attitudes level of the candidates who are satisfied with the physical and sports department has been found higher than non-satisfied. The authorities think that some measures must be taken for students to be satisfied with education in order to make the education process more attractive. Thus, the level of attitudes to the profession should be increased and then academic achievement may become higher. Therefore, the programs training educational program of physical and education teacher must be prepared meticulously.

**Keywords: The Attitudes towards Teaching Profession, Academic Achievement, Physical Education Teacher Candidates** 

### OP. 223 TEACHING CHESS WITH PEER EDUCATION MODEL

<u>Umut Üner</u><sup>1</sup>, Nevin Gündüz<sup>1</sup>

#### Abstract

The reason of this research is to apply peer education model to chess teaching. Peer education, partnership and collaborative teaching and learning is a term that describes the strategy. Students are active and have equal status, to direct each other, in applications make sharing, discussion and feedback are also actively involved in the process. The research was held in Ali Kuşçu Primary School during the 2013-2014 educational year. The research consists of 6-9 year-old 25 students- 20 students

<sup>&</sup>lt;sup>1</sup> Yüzüncü Yıl University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Gazi University School of Physical Education and Sports

<sup>&</sup>lt;sup>1</sup> Ankara University School of Physical Education and Sports

from 1,2,3 and 4th grades and 5 peer instructors- who participate in chess classes in the frame of extracurricular physical education activities. The 5 peer instructors are voluntary students who are helpful, easy-going and sociable. The 20 students are volunteers and they take part in the research to learn chess. The students in peer instructors group are those who have attended the chess course for at least 2 years and have participated in chess contests, are very successful at chess. The students are taught chess with many helpful methods such as drama, demonstration, cooperative learning, computer-based education, problem solving and exercises. The students participate in chess activities for 160 minutes, once in a week, for 10 weeks at school. In the research, there are 5 study groups of 4 with one peer instructor for each. Before starting the research, the peer instructors group is given some detailed explanations about their tasks before and during the research. Their teacher gives feedback and corrects mistakes when necessary by always staying in touch with the peer instructors in the classroom. By handing out some task cards with the titles below about chess teaching to peer students every week, the chess activity is held. The personal information form is applied to the students at the beginning and at the end of the research (see appendix 1); the self-evaluation form is applied in the end (see appendix 2) and the peer-evaluation form (see appendix 3) is handed out to students. By reading the items on the forms one by one, the teacher helps the students to fill in those forms. In addition, the parents are sent a "parental involvement and satisfaction questionnaire" (see appendix 4) with the help of the students. With the statistical analysis of the research; the frequency, the percentage and the average values of the students' personal information, self-evaluation, peer evaluation forms and the parents' questionnaires are tabulated and interpreted. At the end of the research, the students get approximately a 90 percent rate of success in their level of chess knowledge and they are also more successful both socially and affectively after the application. It is stated on the peer-evaluation forms by the peer students group that their sense of responsibility, sharing, cooperation and communication among themselves have risen.

Keywords: Primary School Students, Chess, Peer Education

# OP. 239 THE INVESTIGATION OF GIFTED STUDENTS' PERCEPTIONS ABOUT CONCEPTS LIKE "PHYSICAL EDUCATION COURSE AND PHYSICAL EDUCATION TEACHER" THROUGH DRAWING-WRITTING METHODOLOGY

Özbay Güven <sup>1</sup>, <u>Aynur Yılmaz</u><sup>2</sup>

#### Abstract

**Objective:** The purpose of this study is to determine emotion and opinion of gifted students attending to Science and Art Center towards physical education class and physical education teacher.

**Method:** In this study, study group was composed of 46 students who attended to Science and Art Centers in Kırıkkale and Trabzon cities during the spring semester of 2013-2014 academic years. It was used qualitative research approach in this study. The drawing-writing technique was used as data collection instruments. The data obtained from participants were coded from K1 to K46. The forms of participate which did not means were excluded from the evaluation. The data collected were subject to content analysis. Categories were given according to frequencies values. Data which were collected beneath specific categories were converted table and supported with students' views. In addition to this, 2 coders' codes and categories were compared to see the competencies between them To provide the reliability of data, the average reliability was calculated.

**Results:** In the research, 4 categories which contain cognitive structure were got about the gifted students' views towards physical education lesson. These categories that "general situation of physical education lesson f(30)", physical education lesson's gains f(6)"," physical education lesson's definition and features f(3)" and "physical education lesson's traditional structure f(1)". In the consequence of analyze of physical education teachers concept's data, 9 categories were achieved. These categories that being negative element f(8), being transmitter and resource of knowledge f(6),

<sup>&</sup>lt;sup>1</sup> Gazi University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Kırıkkale University Faculty of Education Department of Physical Education and Sports

being component and integrative f(5), being justice element f(4), being router and guide f(3), being love element f(3), being exemplary character, being injustice and discipline provider.

**Conclusion:** As a result of the study, it was found that students have positive emotions about the concepts of physical education and physical education teacher. The course of physical education is described as play, amusement, cooperation ground, and developmental domains.

Keywords: Gifted Students, Drawing-Writing Technique, Physical Education Class, Physical Education Teacher

# OP. 240 THE EXAMINATION OF THE OCCUPATIONAL EFFICIENCY OF TEACHER CANDIDATES AND PRACTICES TEACHERS WHO ATTEND IN THE COURSE OF TEACHING PRACTICE

Aynur Yılmaz<sup>1</sup>, Sevinç Namlı<sup>1</sup>

<sup>1</sup> Kırıkkale University Faculty of Education Department of Physical Education and Sports

#### **Abstract**

**Objective:** The purpose of the study is to examine teacher candidates' ideas and emotions about the efficiency of their guidance teachers. Moreover, this study is also aimed to have an understanding about guidance teachers' ideas about the performance of teacher candidates. **Method:** The current study was done in the term of spring in 2013-2014 education year. As participants, 7 physical education teacher candidates who attended to Depertman of Physical Education and Sport in Kırıkkale University and 6 practice teachers who worked in middle school and high school have participated in this study. In analyzing the problem statement, case study design which is a kind of qualitative research method was used. The principle of willingness was taken into consideration. Content analyze was used in the study. Each interviews which were shown in the paper. Then, the form of practice teachers was coded from U1 to U6. Then, The forms of teacher candidates wee coded from A1 to A2. Gathered data was examined by researchers as taken into consideration appropriate titles and concepts. Then categories were gathered. These categories were converted tablo and supported with participant views to provide reliability.

**Results:** The ideas of teacher candidates who made practice schools in the extend of course of teaching practice about practice teachers was given. These ideas were taken into consideration into 7 categories. These are being effective in candidate teachers' orientation (f=6)", the condition of giving feedback to teacher candidates (f=4)", the condition of directing teacher candidates about determining aim of course and behaviors (f=3)",the condition of explanation of which method was used (f=3)", "giving knowledge about course plans to candidates (f=2)" "giving knowledge about effective classroom management (f=2)". 4 categories related to efficiency of teacher candidates who make practice within the context of the course of teaching practice were obtained. These are: "efficiency condition in classroom management", "awareness about the importance of teaching practice", "efficiency condition in teaching methods and techniques", "the efficiency condition in planning and practice course".

Conclusion: As a result of the study, 7 categories which are related to efficiency of teacher candidates' were obtained. These categories contain aim of the course, teaching methods and techniques, teaching pan and programs, classroom management and motivation conditions. These categories are divided into sub categories. When categories which constitute teacher candidates' views are taken into consideration, it was found that they have efficient knowledge about professional competence. 4 categories which are related to the efficiency of teacher candidates get obtained from practice teacher. These categories are efficiency in classroom management, the awareness of the importance of teaching practice, the efficiency of using teaching method and techniques, the efficiency of planning course and application these categories give a knowledge about whether or not teacher candidates have efficient skills.

Keywords: Teaching Practice, Practice Teacher, Physical Education Teacher's Candidate, Qualitative Research

### OP. 250 THE STUDY OF HIGH SCHOOL STUDENTS' EMPATHETIC TENDENCIES WITH RESPECT TO THEIR SPORTING HABITS

<u>Gökhan Bayraktar</u>  $^1$ , Erdoğan Tozoğlu  $^2$ , M. Ertuğrul Öztürk  $^2$ , Öner Gülbahçe  $^2$ 

<sup>1</sup> Ağrı İbrahim Çeçen University School of Physical Education and Sports

#### **Abstract**

Being understood and being acknowledged are fundamental necessities for human being. In interactions among individuals, one can eventually become a model for others by utilizing empathy. Therefore, empathy plays an important role in enabling healthy communications among individuals. This study was performed in an effort to investigate the empathetic tendencies of high school students. In total, 480 students, 162 female and 318 male, participated in this research. As the data gathering tool, to measure the empathetic capabilities of individuals in daily life, "Empathetic Tendency Scale" (ETM) developed by Dokmen in 1988 was utilized. The scale is comprised of a total of 20 items and organized in a five-level Likert fashion. The highest score is 100 and the lowest score is 20. The total represents the individuals' empathetic tendency score; a high score implies high empathetic tendency whereas low score means low empathetic tendency. Scale's confidence coefficient is determined to be 72. Cronbach's Alpha coefficient is calculated to be 0.679 according to the data obtained. In the data analysis, frequency distribution, t test for comparing two variables and ANOVA for comparing more than two variables were applied. The differences among groups are evaluated with p of 0.05 confidence level. According to the findings obtained during the research, no significant difference was observed among students with respect to their grades. On the contrary, a difference with a confidence level of p 0.05 was observed with respect to their genders, residency locations, sporting habits, type of sports performed, durations of sporting activity and the number of years being involved with the sporting habits. According to the fact that the high school student's sporting habits contribute to their empathetic tendencies, it is concluded to be of significance to encourage students to obtain more sporting habits and to utilize the sporting facilities.

Keywords: Emphaty, Emphatic Leaning, Sport

## OP. 262 THE RELATIONSHIP BETWEEN CRITICAL THINKING AND EMPATHIC TENDENCY: THE EXAMPLE OF PRESERVICE PHYSICAL EDUCATION TEACHERS

 $\underline{\text{Ezel Nur Korur}}^1$ , Erman Öncü  $^2$ , Sonnur Küçük Kılıç  $^2$ 

#### Abstract

**Objective:** In today's modern education philosophy, the skills of empathy and critical thinking count among the most essential skills that teachers should possess. These skills carry more significance for the physical education teachers who have a difficult profession of teaching physical skills. In this context, the purpose of this study was to examine preservice physical education teachers' critical thinking skills and empathic tendencies according to some demographic variables, and to determine the relationship between their critical thinking skills and empathic tendencies.

**Methods:** The study was conducted on 1006 preservice physical education teachers (417 female and 589 male) who were selected from ten universities. In the study, the California Critical Thinking Disposition Inventory (CCTDI) and the Empathy Tendency Criteria (ETC) were administered on the participants as data collection tools. The CCTDI was first developed by American Philosophical Association (1990) and it was translated into Turkish by Kökdemir (2003). The scale was consisted of

<sup>&</sup>lt;sup>2</sup> Atatürk University Kazım Karabekir Faculty of Education

<sup>&</sup>lt;sup>1</sup> 19 Mayıs University Department of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Karadeniz Technical University School of Physical Education and Sports

51 items and all items were scored by using a six-point Likert scale. The ETC, on the other hand, was developed by Dökmen (1988). It was consisted of 20 items and these items were scored by using a five-point Likert scale. Descriptive statistics, t test, ANOVA, Tukey post-hoc test and correlation analysis were used in the data analysis.

**Results:** The mean of the CCTDI and the ETC scores of the participants was 3.96 and 3.39, respectively. The CCTDI and ETC scores of the participants did not differ significantly according to gender ( $t_{CCTDI}$ =0.17, p=0.87;  $t_{ETC}$ =1.17, p=0.24). The CCTDI scores of the participants differed significantly according to class level (F<sub>CCTDI</sub>=10.85, p=0.00). The scores of the freshman students (3.84) were lower than the scores of the sophomores (3.99), juniors (3.97) and seniors (4.07). The ETC scores of the participants also differed significantly according to the years of study at the university (FETC=8.23, p=0.00). The scores of the freshmen (3.29) were lower than the scores of the sophomores (3.43), juniors (3.40) and seniors (3.48). There was a significant difference in the CCTDI scores of the participants according to the education level of their mothers (F<sub>CCTDI</sub>=9.46, p=0.00). The scores of the participants whose mothers had university degrees (3.76) were lower than the scores of the participants whose mothers were illiterate (3.99). Same score for the mothers with primary school, secondary school and high school diplomas are 4.06, 3.95 and 3.93, respectively. There was also significant difference in the ETC scores of the participants according to education level of their mothers (F<sub>ETC</sub>=3.49, p=0.00). The scores of the participants whose mothers had university degrees (3.25) were lower than the scores of the participants whose mothers finished either primary school (3.45) or secondary school (3.43). The CCTDI scores of the participants differed significantly according to the education level of their fathers (F<sub>CCTDI</sub>=4.53, p=0.00). The scores of the participants whose fathers had one or more university diplomas (3.86) were lower than the scores of the participants whose fathers had primary school diplomas (4.02) and secondary school diplomas (4.02). The participants' ETC scores also differed significantly according to the education level of their fathers (F<sub>EEÖ</sub>=5.20, p=0.00). According to this result, the scores of the participants whose fathers graduated from a university (3.27) were lower than the scores of the participants whose fathers finished primary school (3.41), secondary school (3.46) and high school (3.44). Additionally, significant positive correlation was observed between the total CCTDI and the ETC scores of the participants (r=0.52; p=0.00).

Conclusion: Both critical thinking skills and empathic tendencies of the participants were at the middle level. The education level of the parents of the participants and the years of study spent at the university can be said to be determining factors in the critical thinking and empathic skills of the prservice physical education teachers. The most striking result of the study was that the participants having parents with university degrees had lower empathic tendency and critical thinking skills than the ones whose parents did not graduate from a university. The results of the study showed that there was a direct correlation between the critical skills and the empathic tendencies of the participants. In future studies, it is recommended that examining the correlation of these two dependent variables with an independent variable such as academic success can be necessary to arrive at more sound conclusions.

Keywords: Critical Thinking, Empathy, Preservice Physical Education Teacher

### OP. 263 LIFELONG LEARNING TENDENCIES OF PHYSICAL EDUCATION AND SPORT SCHOOL STUDENTS

Volkan Aydoğdu <sup>1</sup>, <u>Ezel Nur Korur</u> <sup>1</sup>, Erman Öncü <sup>2</sup>, H.Mehmet Tunçkol <sup>2</sup>

#### **Abstract**

**Objective:** According to the Turkish Board (Ministry) of National Education (2009), lifelong learning is any kind of learning activity that an individual participates in order to improve his/her knowledge

<sup>&</sup>lt;sup>1</sup> 19 Mayıs University Department of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Karadeniz Technical University School of Physical Education and Sports

and skills, and foster his/her interests and capabilities with a perspective on personal, social and career life. In today's world individuals such individuals who are keen on lifelong learning are needed because of the rapid changes in the domains of science and technology (Bagnall, 2006). The necessity of possessing the required skills for lifelong learning is equally valid for the university students who will be employed in various positions in the discipline of physical education and sports. The purpose of this study was to determine' lifelong learning tendencies of physical education and sport school students and to examine their lifelong learning tendencies according to some demographic variables (gender, year of study and subject of study).

**Method:** The study was conducted on 214 PE students (64 female and 150 male) who were enrolled in the Karadeniz Technical University Physical Education and Sport School in 2013-2014 Spring Semester. Their ages ranged between 18 and 29 (M<sub>Age</sub>=21.71±2.21). In the study, the Lifelong Learning Scale (LLS) was administered on the participants as the data collection tool. The LLS was first developed by Diker Coşkun (2009) in order to measure the lifelong learning tendencies of university students. The scale was consisted of 4 factors (F1: *Motivation*, F2: *Persistence*, F3: *Self-Regulation*, F4: *Curiosity*) and 27 items. all items were measured and sorted by using a six-point Likert scale. Cronbach Alpha reliability coefficients were measured as 0.92 for the total scale, 0.88, 0.87, 0.88 and 0.90 for the subfactors, respectively. Descriptive statistics were performed on all variables. t test, one-way ANOVA and Tukey post-hoc test were used in the data analysis. Cronbach's alphas were calculated for the total scale and its subfactors in order to evaluate their internal consistencies.

Results: The mean of the LLS total scores of the participants who participated in this study was 119.08. The means counted for the subfactors were 30.27, 27.52, 25.21 ve 36.08, respectively. The analysis showed that the participants' LLS scores did not differ significantly in according to the gender variable ( $t_{F1}$ =0.79, p=0.43;  $t_{F2}$ =1.24, p=0.22;  $t_{F3}$ =1.11, p=0.27;  $t_{F4}$ =1.33, p=0.18; t<sub>Total</sub>=1.55, p=0.12). The students' LLS scores differed significantly in the *Curiosity* factor and the total scale in respect to the number of years spent at the university (F<sub>F4</sub>=2.91, p=0.04; F<sub>Total</sub>=2.81, p=0.04). According to this result, the scores of the participants who studied at  $3^{rd}$  year (M<sub>F4</sub>=38.69,  $M_{Total}$ =124.08) were higher than the scores of the participants who studied at 4<sup>th</sup> year ( $M_{F4}$ =32.95, M<sub>Total</sub>=112.16). The students' LLS scores differed significantly in the Motivation factor, the Persistence factor and the Curiosity factor and the total scale in respect to the variable of the department ( $F_{F1}$ =3.46, p=0.03;  $F_{F2}$ =6.05, p=0.00;  $F_{F4}$ =5.47, p=0.01;  $F_{Total}$ =6.29, p=0.00). Whereas the scores of the participants who studied at the department of the Sport Management (MF1=31.44, M<sub>F4</sub>=38.90, M<sub>Total</sub>=125.91) were higher than the scores of the participants who studied at the department of the Physical Education and Sport Teaching (M<sub>F1</sub>=29.51, M<sub>F4</sub>=33.64, M<sub>Total</sub>=114.65). In the Motivation factor and the Curiosity factor and the total scale, the scores of the participants who studied at the department of the Sport Management (MF2=28.93) were higher than the scores of the participants who studied at the department of the Coaching Education (MF2=25.57) in the Persistence

Conclusion: Lifelong learning tendencies of the participants were above the middle level. Our findings demonstrated whereas the participants' lifelong learning tendencies did not differ in according to gender, the number of years and the subjects these participants studied had important effects on their lifelong learning tendencies. This study had its limitations in terms of the characteristics of its sample. The sample of this study was chosen from the students of a single university. Additionally, it is suggested that the relationship between lifelong learning tendency and different independent variables such as academic success level can be examined in the future studies.

Keywords: Lifelong Learning, Continuing Learning, Curiosity, Physical Education and Sport School Students

# OP. 273 THE INVESTIGATION OF THE RELATIONSHIP BETWEEN SELF ESTEEM AND ATTITUDES TOWARDS CHEATING OF THE PHYSICAL EDUCATION PROSPECTIVE TEACHERS' (CBU, PES TEACHERS')

 $\underline{\mathsf{M\"umine}\ \mathsf{Soyt\"urk}^1}$ , Özden Tepeköylü Öztürk  $^2$ , Erdoğan Topuz  $^1$ , Halil Yetim  $^1$ 

### **Abstract**

Objective: Attitude is defined as a tendency attributed to an individual which creates the thoughts, emotions, and behaviors in a regular way. When attitude combines with the environmental factors, behavior can be formed. For this reason, it is important for the public welfare to develop an attitude which is either positive or negative towards the practices in the society which can be regarded as good or bad. School is one of the most effective places in developing attitude towards various objects, since education is deliberate change of terminal behavior. Teachers are one of the most important factors who shape the attitudes of the students with the teaching methods he/she uses, materials, personality structure and even with their attitudes in the teaching environment. Cheating is stated as a significant educational problem about the attitudes of the students in the process of education. According to the Article 7/e of the higher education student disciplinary regulations, cheating is considered as a crime. Self-esteem is seeing oneself worthy, positive and worth to be liked and being satisfied about oneself without thinking that he/she is more or less superior than others. It is seen that self-esteem level affects the attitudes of the young people from many ways. In this context, it is thought that the attitudes of the students towards cheating and their self-esteem are related. For this reason, it was aimed to investigate the relation between the self-esteem levels of the prospective teachers of physical education and their attitudes towards cheating. In addition, it was also investigated if these two dependent variables change or don't change according to the independent variables in the scope of the research.

**Method:** The research was performed during the spring semester in 2013-2014 academic years. 275 students who are being educated in Celal Bayar University PES Teacher department are the population of the research. 167 prospective teachers of physical education  $(X_{(age)} = 21,44\pm1,98)$  participated in the study voluntarily, including 70 women  $(X_{(age)} = 20,90\pm1,82)$  and 97 men  $(X_{(age)} = 21,82\pm2,010)$ . Quantitative research techniques were used in the research. To measure the self-esteem of the prospective teachers, Self-esteem Scale was used which was developed by Rosenberg and whose validity and reliability studies were done by Çuhadaroğlu (1986) in our country. The scale which has also negative items consists of 10 items. According to the scores from the scale, 0-1 point is evaluated as high, 2-4 points are evaluated as medium, and 5-6 points are evaluated as low self-esteem. Scale for Attitude Towards Cheating which was developed by Semerci (2003) was used in order to measure the attitudes towards cheating. The scale consists of 67 items and has reverse items. The high score obtained from the 5-point likert scale shows that the attitudes of the participants are towards not cheating. The information related to the independent variables of the research was determined by Personal Information Form. While independent groups t test, one-way ANOVA and Pearson Correlation tests were used which are from the parametric tests for the data which has normal distribution, Kruksal Wallis H test was used for the data which doesn't have normal distribution in the research. Type 1 mistake is accepted as 5%.

**Results:** It was found that 89 (53.3%) of the students has high self-esteem, 69 (41.3%) of them has medium, and 9 (5.4%) of them has low self-esteem. In the self-esteem scores, statistically significant differences were found according to the gender ( $t_{(165)}$ =3.360, p=0.001; women has higher self-

esteem), grade  $(F_{(3-163)}=2.956, p=0.034; 3^{rd})$  grade students has higher self-esteem than 2nd grade), being happy to be educated in this department ( $x^2=10.724, p=0.005$ ; the ones who are happy have higher self-esteem level than the ones who are indecisive), and cheating/not cheating factors  $(t_{(165)}=2.104, p=0.037;$  ones who don't cheat has higher self-esteem level than the ones who cheat). No statistically significant difference was found according to perception of monthly family income, wanting to be educated in another department, cheating number, the best expression about themselves

<sup>&</sup>lt;sup>1</sup> Celal Bayar University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Pamukkale University School of Sport Sciences and Technology

factors. 104 students (62.3%) stated that they cheated, and 63 students (37.7%) stated that they never cheated. It was found that the average cheating score is  $2.95\pm0.42$ . According to this level of prevalence it can be said that they have moderate attitude towards cheating. There is a statistically significant difference in the attitude score towards cheating according to the factors of wanting to be educated in another department ( $t_{(165)}=2.794$ , p=0.006; the ones who doesn't want have a more positive attitude than the ones who want, and the best expression about themselves ( $F_{(2-164)}=3.096$ , p=0.048; the ones who express themselves as prospective teachers have more positive attitude than the ones who express themselves as students). There is no statistically significant difference in attitude score towards cheating scores according to gender ( $t_{(165)}=0.037$ , p=0.971), grade ( $F_{(3-163)}=2.330$ , p=0.076), perception of the monthly family income ( $t_{(165)}=0.037$ , p=0.728), being happy to be educated in this department ( $t_{(165)}=0.037$ , p=0.055), and the number of cheating ( $t_{(165)}=0.037$ , p=0.055), and the number of cheating ( $t_{(165)}=0.037$ , p=0.027). However, negative and weak relation was found between attitudes towards cheating and the number of cheating ( $t_{(165)}=0.027$ , p=0.729). However, negative and weak relation was found between attitudes towards cheating and the number of cheating ( $t_{(165)}=0.027$ , p=0.024).

**Conclusion:** As a result, it can be said that in this research, self-esteem of the prospective teachers of physical education is not related to their attitudes towards cheating but as they develop more negative attitudes towards cheating, their number of cheating declines.

Keywords: Self-Esteem, Teaching, Attitude, Prospective Teachers

# OP. 316 THE EFFECTS OF A PHYSICAL ACTIVITY (SWIMMING) ON THE MOTOR SKILLS AND SEVERE CRISES OF CHILDREN WITH AUTISM SPECTRUM DISORDER (ASD)

### Ebubekir Aksay<sup>1</sup>

### **Abstract**

**Objective:** This study was conducted in order to investigate level of effects of physical activity on physical development, motor skills and social skills of children with autism spectrum disorder (ASD). **Method:** 45 minutes program of physical activity through has been implemented to 23 (13 in swim group – 10 in sports hall group) children with ASD diagnosis three times a week for 16 weeks, then follow up was conducted for 6 weeks. The participants were chosen from among 46 children diagnosed with autism who had at least 10 severe crises per week. To measure subjects' physical and motor abilities, the Brockport Physical Fitness Test (BPTF) and the Movement Assessment Battery for Children (MABC) were used, respectively. IBM SPSS 21 (for Mac) statistical software was used for evaluation of recorded measurements; Results were expressed as mean ±SD.

**Results:** With regular physical activity motor skill development of autistic children can be supported, and crises may be completely eliminated (p < 000.1). In most of the children, who had an initial average of seven serious crises per week, the crises ceased, and the overall mean frequency of crises decreased to 1.76 per week for swim group and 1.5 per week for sport hall group (p > 000.1). The number of crises increased during the 6 weeks after the program, when no activity was performed. Interviews with teachers after the research indicated that positive improvements were observed in children in several areas such as communication with others in school and daily life, concentration, motivation, courage, understanding what is said, game skills, and creativity. Additionally, regular sleep patterns were positively affected during the exercise period.

**Conclusions:** This research has shown that the daily 45 minutes of exercises by limiting the exercise field positive results in physical performance and motor skills. Through physical activity the decreases on stereotypic behaviors and severe crises and the increase in social skills can be obtained in very short-term. Therefore, determining the factors affecting participation of individuals with ASD in physical activities is important.

Keywords: Autism Spectrum Disorder, Motor Skills, Social Skills, Physical Activity

<sup>&</sup>lt;sup>1</sup> German Sport University German Sport University

## OP. 350 LEARNING STYLES OF PRESERVICE PHYSICAL EDUCATION TEACHERS ACCORDING TO KOLB'S MODEL OF LEARNING STYLES

Ceyhun Alemdağ<sup>1</sup>, Erman Öncü <sup>1</sup>

#### Abstract

**Objective:** Learning style is a "kind of way individuals follow at the stages of receiving and possessing information". For this reason, learning style is regarded as one of the key concepts in the learning process. Accordingly, individual differences of the students are effective in their learning processes (Ekici, 2013). Therefore, this study aims to determine the learning styles of preservice physical education teachers according to Kolb's Model of Learning Styles and to examine these styles in respect to some variables in order to shed a light in the learning processes of respected individuals. **Method:** The study sample consists of 351 preservice physical education teachers (123 females, 228 males) who were the students of physical education teaching departments of four universities (Karadeniz Technical University, Gümüşhane University, Adnan Menderes University and Ağrı İbrahim Ceçen University) in 2013-2014 Spring Semester. Kolb Learning Style Inventory-III (LSI-III) was used as the data collection tool. Four distinct learning styles were defined in LSI-III that was developed by Kolb (1999) in order to determine the learning styles of the individuals. The inventory was adapted into Turkish by Evin Gencel in 2007. The inventory contained 12 items, each of which included four statements. Data was analyzed using  $\chi^2$  (Chi-Square) test.

Results: The study found that 34.19% of the participants had Diverging learning style, 28.49% had Assimilating learning style, 21.08% had Converging learning style, and 16.24% had Accommodating learning style. The results of  $\chi^2$  test indicated that this difference between the learning styles was statistically significant ( $\chi^2$ =26.49, p=0.00). The ratio of female and male participants who had Diverging learning style were 33.3% and %34.6%, respectively. For the Assimilating learning style, these ratios were 27.6% and %28.9%. The ratios were 22.8% and %20.2% for the Converging learning style and 16.3% and 16.2% and for the *Accommodating* learning style. The results of  $\chi^2$  test indicated that there was no significant difference between the learning styles with respect to the gender ( $\chi^2$ =0.34, p=0.95). The ratios acquired from the freshmen, sophomores, juniors and seniors also differed. For the Diverging learning style the ratios were 43.2%, 27.8%, 24.7% and 40.2%, respectively. For the Assimilating learning style the percentages came out as 27.4%, 5.1%, 27.3% and 23.2%, for the Converging learning style the percentages were 16.8%, 25.8%, 27.3% and 14.6%, for the Accommodating learning style the distribution according to the classes were 12.6%, 11.3%, 20.8% and 22.0%. The results of  $\chi^2$  test revealed that there was significant difference between the learning styles according to the years of study at the university ( $\chi^2=18.32$ , p=0.03). The distribution ratio of the preservice physical education teachers who had different academic success levels (1.00-1.99, 2.00-2.99 and 3.00-4.00) for the *Diverging* learning style were 52.2%, 34.1% and 30.8%, for the Assimilating learning style were 21.1%, 26.9% and 31.7%; for the Converging learning style were 8.7%, 22.1% and 21.7%; and for the *Accommodating* learning style were 13.0%, 16.8% and 15.8%. The results of  $\chi^2$  test indicated that there was no significant difference between the learning styles with respect to the level of academic success ( $\chi^2$ =5.22, p=0.52). The percentage of athlete and non-athlete participants who had *Diverging* learning style were 33.6% and 34.6%. For the *Assimilating* learning style, the ratio was 30.8% and 26.9%, for Converging learning style it was 20.3% and 21.6%, and for the Accommodating learning style it was 15.4% and 16.8%. The results of  $\chi^2$  test indicated that there was no significant difference between the learning styles with respect to the variable of being an athlete or not ( $\chi^2 = 0.65$ , p=0.89).

**Conclusion:** The study found out that the preservice physical education teachers mostly had *Diverging* learning styles, and the styles of the *Assimilating*, *Converging*, and *Accommodating* came in a descending order. Whereas learning styles of the participants did not differ according to the variables

<sup>&</sup>lt;sup>1</sup> Karadeniz Technical University School of Physical Education and Sports

of gender, academic success level and athletic occupation, their learning styles differed depending on their years of study at the university. Additionally, the study found that the freshmen and seniors mostly preferred *Diverging* learning style, sophomores preferred *Assimilating* learning style, and the juniors preferred *Assimilating* and *Converging* learning styles. These findings can lead us to the conclusion that the year of study at the university could be a decisive factor in determining the dominant learning style preference of the preservice physical education teachers.

Keywords: Learning, Kolb's Model of Learning Styles, Preservice Physical Education Teacher

## OP. 352 STUDENTS AND PARENTS' ATTITUDES TOWARDS PHYSICAL EDUCATION COURSE IN PRIMARY SCHOOLS

Arif Serkan Yaldız<sup>1</sup>, <u>Oğuz Özbek</u><sup>2</sup>

- <sup>1</sup> Ankara National Education Directorate, Physical Education Teacher
- <sup>2</sup> Ankara University, Faculty of Sport Sciences

#### Abstract

**Objective:** The aim of this study is to determine 6, 7 and 8th grades primary school students' and their parents' attitudes towards participation in physical education classes and also to reveal whether these attitudes change according to the students' and parents' personal characteristics.

**Method:** The study consists of voluntarily participated 717 students who received education in Cankaya, Yenimahalle and Mamak urban schools from Ankara Province Directorate of National Education and 640 parents. In this study, two different attitude scales were used as data collection tools. One of them is student attitude scale and the other one is parent attitude scale that give information about students' and their parents' attitudes towards physical education lesson.

Measurement tool was applied to voluntary participants by the researcher. Student attitude scale towards physical education lesson adapted by Ozer and Aktop (2003) includes personal information and 49 items. On the other hand, parent attitude scale towards physical education lesson developed by Oncu (2007) includes personal information and 21 items. Besides, five points 'Likert Scale' was used in the evaluation of both scales.

First of all, scale owners' written permissions were taken for the implementation of the attitude scales. The essential ethical permission for the suitability of the scales was obtained from Ankara University Ethics Committee. In addition, necessary permission was obtained from Ankara Province Directorate of National Education for the implementation of the scales at schools. After implementation of the attitude scales, essential examinations related with the outcomes of the research were done and normal distribution of data was examined. It was found that the data were not normally distributed. Therefore, non-parametric tests, the Mann-Whitney U test for binary groups, and Kruskal-Wallis test for groups that have more than two members were implemented to the findings of the research.

**Results:** In relation to primary school students' attitudes regarding physical education lesson, a significant difference was found in results of the Mann-Whitney U test that was made on the opinions of the students who play and do not play in a sport branch of school team (U=330.9, p<.05). Considering the mean ranks, students who participate in a sport branch of school team (x=202.4) have more positive attitudes towards physical education lesson compared to the students who do not participate in a sport branch of school team (x=194.6). Additionally, primary school students' attitudes towards the physical education lesson, a significant difference at the level of .05 was found on the results of the Kruskall-Wallis analysis made on the scores which was applied according to the classes [X2(2)=9.831, p<.05]. According to the Mann-Whitney U, made in order to find the different group, it is determined that 6th grade students' points average of the attitudes (x=200.3) are higher than 7th grade (x=194.4) and 8<sup>th</sup> grade points average of the attitudes (x=191.4). Furthermore, it is found that the grade level of students is getting higher, the students' attitudes towards physical education lesson is getting lower. Besides, a meaningful difference was found in results of the Mann-Whitney U test, made on the primary school students' parents total opinions based on the fact that whether they are doing exercise or not (U=413.5, p<.05). Accordingly, it is found that parents who exercise (x=88.2)

have more positive attitudes towards physical education lessons compared to the parents who do not exercise (x=83.6). In addition, a significant difference was found in results of the Kruskall-Wallis test that was made on the parents' opinions according to their attitudes about watching TV programs related with sports [X2(2)=30.010, p<.05]. So, it was found that when the frequency of watching sports programs on TV getting increase, primary school students' parents positive attitudes towards physical education lesson also getting increase.

Conclusion: As a result, it can be said that 6, 7 and 8th grade primary school students' and their parents' attitudes towards physical education lesson are high in the positive sense. However; when the grade level of primary students increased, their attitudes towards physical education lesson decreased. Furthermore, it was found that primary school male students have more positive approach to physical education lesson than female students. Additionally, according to the result of the study, students who participate in any branch of the school team have more positive attitudes towards physical education lesson compared to the students who do not participate in any branch of the school team. Similarly, when we look at the parents, it was seen that there is no difference between male and female parents' attitudes and also they generally have positive attitudes towards physical education lesson. In addition, it was determined that parents who do exercise have more positive attitudes towards physical education lesson compared to the parents who do not exercise. Apart from these, it was seen that parents' attitudes towards physical education lesson do not change according to their educational status. And also, it was found that parents who watch TV programs about sport have positive attitudes towards physical education lesson in contrast to parents who sometimes watch TV programs and never watch ones.

Keywords: Parents, Physical Education, Attitude, Primary Students

### OP. 357 INVESTIGATION OF THE TEACHING EXPERIENCE COURSE EFFECTS ON THE TEACHER COMPETENCES

Biray Köçen <sup>1</sup>, Murat Kangalgil <sup>1</sup>, Fatih Özgül <sup>1</sup>

### Abstract

Teaching experience gives preservice teachers teaching skills on the teaching area and at the level of teaching personally in the classroom. And also a course that enables, teaching in a planned way of a specific course or courses and a course that application activities discussed and evaluated. Teaching experience provides to the preservice teachers; creating a basis for the decisions related to the profession, to be prepared for the profession, to develop purposes related to the profession, to practice methods and techniques related to the proffesion. General aim of the teaching experiences is to contribute the candidate's personal and professional development. Using the knowledge, skills, attitudes, values and habits as effective, efficient and confidently gained in the field of culture, general culture and teaching formation courses.

Aim of the research is determining the effects of the teaching experience course on the preservice teacher's general teacher competences. For this purpose research was conducted with 250 individuals who selected randomly and who studied in the physical education and sports high school (31 individuals) and the Faculty of Education (219 individuals) of the Cumhuriyet University. 148 were female and 102 were male of the teacher candidates. In the research; General substance of the Ministry of National Education Teacher Competencies composed of 5-point Likert-type scale of grading was established. The scale includes total of 31 articles. The scale's Cronbach alpha internal consistency coefficient was found 0.92. Data were collected in two stages. In the first stage, the preservice teacher's opinions taken about teacher competences before the teaching practice course. After 14 weeks of teaching experience, the second time from the same teacher candidate's comments about teacher competences were received. In analyzing the data, frequencies, percentages used, and has been solved with "t" test. In the statistical calculations significance level was set at 0.05. According to the findings obtained from the data, opinions of preservice teachers before teaching practice about teacher

<sup>&</sup>lt;sup>1</sup> Cumhuriyet University School of Physical Education and Sports

competences that reflect the pre-test scores (4,205±,48) and post-test scores after experience (3,862±,41) found significant difference between (p<,001). And it was seen that teaching experience have a negative effect on the teacher competences. This difference is due to the lack of the teacher competence points before the teaching experience. According to research results, before the teaching practice course the preservice teachers found themselves as adequate but after the teaching course they found themselves more inadequate about teacher competences. This situation due to the preservice teacher's problems that faced during their practice, lack of the course time, their inexperience and failure to get used to the profession can be said.

**Keywords: Preservice Teacher, Teacher Competences, Teaching Experience** 

# OP. 366 EXAMINATION OF WOMEN HEALTH-RELATED FITNESS PROGRAM PARTICIPANTS' PERCEIVED AUTONOMY SUPPORT AND BASIC PSYCHOLOGICAL NEEDS IN EXERCISE AT A UNIVERSITY SETTING

Shabnam Mehrtash<sup>1</sup>, Mustafa Levent İnce<sup>1</sup>

#### **Abstract**

Using self-determination theory and trans-theoretical model, the aim of this study was to examine the women health-related fitness participants' perceived autonomy support and basic psychological needs in exercise in terms of their exercise stages of change (five stages including pre-contemplation, contemplation, preparation, action and maintenance) preferred physical activities (aerobic vs muscular endurance & flexibility), frequency of participation (weekly number of days in physical activity) and job type (student, administrative staff and academic staff) at a university setting. The sample consisted of 175 women participating in health related fitness classes including: Latin Aerobic Zumba, Free-Style Combat, Tempo, Pilates, Power-Step and Yoga, at a university (M age= 25.1, SD= 7.2). Participants completed the Perceived Autonomy Support, Basic Psychological Needs in Exercise Setting and Physical Activity Stages of Change Questionnaires. Data analyzed by using one-way ANOVA and one-way MANOVA. Findings indicated that perceived autonomy support was significantly different by exercise stages of change (p < .05). Further analysis indicated that only the participants in the Action stage had higher perceived autonomy support from the participants in the Contemplation stage (p<.05). Moreover, there was no significant difference between perceived autonomy support with participants' preferred physical activity, weekly frequency of participation and job type (p>.05). Findings on psychological needs in exercise revealed that there was a significant difference by participants' preferred physical activities and job type (p<.05). Aerobic type physical activity participants had higher perceived basic psychological needs in exercise score than the participants of muscular endurance and flexibility type of activities (p<.05). In addition, among type of jobs, student and administrative staff had higher perceived basic psychological needs in exercise scores than the scores of academic staff (p<.05). However, there was no significant difference in the basic psychological needs in exercise by participants' stages of change and weekly frequency of activity (p>.05). In conclusion, findings indicated that participants' perceived autonomy is differed by exercise stages of change level, and basic psychological needs in exercise is differed by preferred physical activities and job type. In order to meet the needs of women health related fitness program participants in the study setting, health related fitness program providers and instructors should consider perceived autonomy support and basic psychological needs by exercise stages of change, preferred physical activities and job type.

Keywords: Women, Health-Related Fitness, Perceived Autonomy Support, Basic Psychological Needs

<sup>&</sup>lt;sup>1</sup> Middle East Technical University Physical Education and Sports

### OP. 377 LEVEL OF TENDENCY TOWARDS ACADEMIC MISCONDUCT OF THE STUDENTS OF THE FACULTY OF SPORTS SCIENCES

Oğuz Özbek <sup>1</sup>, <u>Senem Ceyiz</u><sup>1</sup>

<sup>1</sup> Ankara University Faculty of Sport Sciences

#### **Abstract**

**Objective:** The aim of this study is to investigate the level of tendency towards academic misconduct of the students of the Faculty of Sports Sciences.

Method: This study employs the descriptive method. Target population of the study is the students of Ankara University Faculty of Sports Sciences. According to Ural and Kılıç (2006); the lower limit of the sample number to be taken from a target population of 500 people is calculated as 217 for an error of 0.05 that admits toleration. 220 students from Ankara University Faculty of Sports Sciences voluntarily participated in the study. As a data-gathering tool for the study, Academic Misconduct Tendency Scale (ASEÖ) developed by Eminoğlu and Nartgün (2009) is used. The scale includes a total of 22 articles under the four sub-dimensions of "tendency to cheat", "tendency for misconduct in works such as homeworks and projects", "tendency for misconduct during the process of research and reporting" and "tendency for misconduct regarding references." Five Point Likert Scale is used for the evaluation of the scale. For the application of the scale, permission is taken from the primary author who developed the scale. The reliability (Cronbach's Alpha) coefficient of the data acquired through the scale is found to be 82. Normal distribution of the data is evaluated and it is established that the data is not distributed normally. For this reason, from among the non-parametric tests, Mann-Whitney U test was applied to dual groups and Kruskall-Wallis test for groups of more than two.

**Results:** In the order of the scores pertaining to the opinion of students regarding the sub-dimensions of the Scale for the Measurement of Students' Tendency Towards Academic Misconduct, a score of  $(\chi=3,05\pm,752)$  for the dimension of "referential misconduct",  $(\chi=2,95\pm,696)$  for the dimension of "homework and project misconduct", ( $\chi$ =2,74±,897) for the dimension of "tendency to cheat" and  $(\chi=2,56\pm,863)$  for the dimension of "research reporting misconduct", and  $(\chi=2,79\pm,632)$  for the scale general total has been determined. It has been observed that "referential misconduct", homework and project misconduct" and "tendency to cheat" happen on a medium-level and "research reporting misconduct" happen on a lower level. It has been observed that the total level of tendency towards academic misconduct was on a medium-level. According to the gender of the students who participated in the study, no significant statistical difference has been determined regarding the students' opinions on the dimensions of Tendency to cheat, (U=5390, p>.05), Homework and project misconduct (U=5652, p>.05), Research reporting misconduct (U=5329.5, p>.05) and referential misconduct (U=4921.5, p>.05) According to the subjects the students are studying, no significant statistical difference has been determined based on a Kruskall Wallis analysis regarding the students' opinions on the dimensions of Tendency to cheat [X<sup>2</sup>(2)=1.08, p>.05], Homework and Project misconduct [ $X^2(2)=4.41$ , p>.05], Research reporting misconduct [ $X^2(2)=0.18$ , p>.05) and referential misconduct [X<sup>2</sup>(2)=2.35, p>.05] According to the years the students are in, no significant statistical difference has been determined based on a kruskallwallis analysis regarding the students' opinions on the dimensions of Tendency to cheat  $[X^2(3)=.651, p>.05]$  and Homework and Project misconduct  $[X^2(3)=.418, p>.05]$ . According to the years the students are in, significant statistical difference has been determined based on a Kruskall Wallis analysis regarding the students' opinions on the dimension of Research reporting misconduct [ $X^2(2)=0.38$ , p<.05] According to the result of the Mann-Whitney U test conducted in order to find the group that creates the difference, a significant difference has been found between 2nd year students on one hand and 1st, 3rd and 4th year students on the other. When the average of the scores regarding the opinions is taken into account, it has been determined that 1st year (x=2.66), 3rd year (x=2.67) and 4th year (x=2.65) students have a higher tendency towards Research reporting misconduct compared to the 2nd year students (x=2.31). According to the years the students are in, significant statistical difference has been determined based on a kruskallwallis analysis regarding the students' opinions on the dimension of Referential

misconduct [ $X^2(2)$ =.009, p<.05] According to the result of the Mann-Whitney U test conducted in order to find the group that creates the difference, a significant difference has been determined between 2nd year students on the one hand and 3rd and 4th year students on the other. When the average of the scores regarding the opinions is taken into account, it has been determined that 3rd year (x=3.20) and 4th year (x=3.20) students have a higher tendency towards Referential misconduct compared to the 2nd year students (x=2.80).

Conclusion: According to the results of the study, it has been determined that students of Ankara University Faculty of Sports Sciences have a middle-level tendency for referential misconduct, homework and project misconduct and cheating, and their tendency for research reporting misconduct is on a lower level. Their total level of tendency toward academic misconduct has been determined to be on a middle level. No significant difference has been found among the opinions of students regarding their tendency for academic misconduct according to their gender and the subjects they study. It has been determined that first, third and fourth year students have a higher tendency towards research reporting misconduct compared to second year students. On the other hand, it has been determined that third and fourth year students have a higher tendency towards Referential misconduct compared to second year students.

**Keywords: Academic Misconduct, Students of Sports Sciences** 

## OP. 382 THE EFFECTS OF WHEELCHAIR (WC) MOBILITY COURSES ON WC USAGE SKILLS

Ebubekir Aksay<sup>1</sup>, Horst Strohkendl<sup>2</sup>

#### Abstract

**Objective:** The aim of WC mobility courses was to help achieve technical skills required for appropriate WC usage and improve physical skills. This study was carried out in order to determine the extent at which physically disabled individuals using WC in Turkey can use WC and the extent at which the mobility courses will be able to affect the WC use.

**Method:** A total of 286 WC users between age 16 and 52 years, without any immobility of upper extremities, were involved in this study. In order to measure the WC usage skills, the AkRoFa (Aksay Rollstuhlfahr) Test, developed by the researcher, measuring 17 different usage skills, was utilized. Applied in 4 sessions and scored over 30 points, the AkRoFa test measures the skills such as driving, slalom, balance, ascending and descending ladder, and going up and down from hill. Depending on the difficulty of the test, each of the successful skill is scored with a point between 1 and 3. In order to determine the improvements in participants' skills, the pre- and post-test have been implemented. In statistical analyses, standard deviation and mean values have been calculated with IBM SPSS 21 software.

Results: While 36 participants aged between 16 and 52 years spent their approximately 11 hours of a day on wheelchair doing physical exercises in a sport club, 250 participants did not participate in any sportive activity. After completing the skill tests with WC users participating in the study from different locations of Turkey, it was determined that they couldn't completely succeed in using WC even though they spend several hours of the day on WC. But after completion of WC mobility courses in 4 sessions each of 90 minutes, the participants achieved important skill improvement in most of the skills such as slalom, balance, ascending and descending ladder, and going up and down from hill. It was observed that the WC usage skills of WC users actively involved in sports were much higher than that of WC users not actively involved in any sport. While the general mean score of all of the users in performed pre-test was 6.3 points on the scale of 30, they completed most of the exercises successfully after skill exercises and they got the mean score of 26.4 points after the exercises.

**Conclusion:** Just like non-disabled individuals participating in the social life, the disabled individuals do have the right to participate in the social life as per their own desires and decisions. The

<sup>&</sup>lt;sup>1</sup> German Sport University German Sport University

<sup>&</sup>lt;sup>2</sup> University of Cologne Faculty of Human Sciences

precondition of this is to procure the environment with no barrier and to ensure unburdened entrance in every domain, and to make the environment usable for WC users. In addition to that, organizing mobility courses by procuring assistive devices for disabled persons, eliminating the mobility limitations, and allowing these individuals to exhibit their skills through such activities are very important for increasing the life standards. This study has shown that WC usage courses if performed accurately improve the WC usage skills, and consequently contribute to technical performance of these individuals for sustaining their daily lives.

Keywords: Wheelchair, Physically Disabled, Mobility Courses, Skill Exercises

### OP. 385 THE METAPHORICAL PERCEPTIONS OF UNIVERSITY STUDENTS STUDYING IN A SPORTS SCIENCES DEPARTMENT ABOUT THE SCHOOL CONCEPT

Fatih Bektaş <sup>1</sup>, İdris Yılmaz <sup>1</sup>, Akın Çelik <sup>1</sup>, <u>Sabiha Kaya</u> <sup>1</sup>

### Abstract

**Objective:** Metaphor, as a powerful mechanism of mental mapping and modelling for individuals in understanding and restructuring their worlds, has drawn considerable attention from educators in recent times. Metaphors can be used as an instrument for evaluation in this day and age, in which there is a huge demand for sports education, both economically and socio-culturally. Metaphors reflect the emotions, thoughts, beliefs and attitudes of individuals and can help in specifying and restructuring the sufficient, insufficient and deficient aspects of a given educational context. The purpose of this study was to try to understand how university students studying in a sports sciences department conceptualize "school" by means of metaphorical descriptions.

**Method:** A total of 114 individuals, 95 male and 49 female, who were studying in the Ahi Evran University School of Physical Education and Sports in the 2010-2011 academic year, volunteered to participate in the study. To collect the data for the study, all of the participants were asked to create a metaphor related to the concept of "(our) school" by completing the sentence "Our school is like..., because..." A phenomenological research design was used, and the data were analyzed through content analysis. In this context, the process of analysis and interpretation of the metaphors created by the participants consisted of four stages: (1) specifying of metaphors, (2) classifying of metaphors, (3) developing categories, and (4) ensuring validity and reliability.

**Results:** According to the findings, the participants created 134 valid metaphors about the concept of "(our) school". These metaphors were examined in terms of their common characteristics and were gathered under 12 different conceptual categories. According to the results, 36,56% of the participants perceived the concept of "(our) school" as an uncertainty expression, 11,94% as a wealth-diversity expression, 10,44% as a productivity expression, 9,70% as an obligation expression, 6,71% as an injustice expression, 4,47% as a system expression, 4,47% as a continuity expression, 3,73% as a self-seeking expression, 3,73% as a preference expression, 2,98% as belonging, 2,98% as selfishness, and 2,23% as an entrapment expression.

**Conclusion:** Considering the metaphor groups derived from the data, it can be said that the students expressed negative thoughts about the school of physical education and sports, and that schools fail to motivate students sufficiently in reaching their aims. For further studies, it can be suggested that identifying the thoughts of other important shareholders in the school setting, such as educators, employers and education directors of institutions offering sports education, will provide a basis for development and reform in these schools.

Key words: Metaphor, School Metaphors, Perceptions about school, Sports sciences

<sup>&</sup>lt;sup>1</sup> Karadeniz Technical University School of Physical Education and Sports

### OP. 390 THE EXAMINATION OF WORK LIFE QUALITY OF PHYSICAL EDUCATION TEACHER

Mümine Soytürk<sup>1</sup>, Özden Tepeköylü Öztürk<sup>2</sup>

Objective: While technological developments have required to improve the life quality of the people in modern life, human factor, which has no value in classical management approach, has provided the occurrence of "quality of work life" concept over time in work life. In the historical process of work life, although the people who worked in a robotized system as an extension of machines until the 20<sup>th</sup> century began to be valuable in neoclassical period, they started to gain importance with the modern management approaches. In the organizations today, human factor is not a factor which is get yielded by ignoring but it is a factor which is get yielded by improving work conditions. "Quality of work life" concept which occurs in this context emphasizes the human resource which was ignored in organizations for many years. Quality of work life concept has been defined variously in the literature. As management philosophy, it is a way of management which increases the physical and psychological prosperity of the employees, creates changes in institutional culture, and increases the value of all the employees in order to provide more qualitative conditions for the employees. When it is considered that the efficiency level of the organizations is parallel to the efficiency of the employees, quality of work life should be taken into account as a significant factor. Among the education organizations, quality of work life in schools is a concept which is related to the working conditions of the teachers. High level of the quality of work life of the teacher can be seen as a main factor in achieving the aims of general education. Because quality of learning depends on efficiency of teachers. In the education process, the working conditions of the teachers who conduct physical education courses which support holistic development of the students can show differences regarding to the characteristic of the subject when compared to the teachers of other branches. For this reason, the purpose of the study is to investigate the level of quality of work life of physical education teachers. In addition, the study aims to determine whether work life quality of the participants vary according to variables such as gender, educational level of the institution which the participant works, professional seniority level and their willingness to change profession.

**Method:** The research was performed during spring semester in 2013-2014 academic years. 160 physical education teachers' serving in Manisa City Centre are the population of the research. Participants of the study consisted of 32 women ( $X_{\rm age}$ =41.7) and 60 men ( $X_{\rm age}$ =43.2) with total of 92 ( $X_{\rm age}$ =41.1) physical education teachers who volunteered for the study. Quantitative descriptive techniques are utilized in the research. Quality of work life of the participants is measured by "Quality of Work Life Scale" developed by McDonald (2001) and adapted in Turkey by Akın Kösterlioğlu (2011). Additionally a "Personal Information Form" is utilized in order to collect data related to the demographic information of the sample and independent variables of the study. T-test and one way ANOVA test are utilized for data which has normal distribution and Mann Withney U and Krukal Wallis H test are utilized for data which doesn't have normal distribution. Type I error were accept as %5.

**Results:** Findings indicate that the differences according to variables such as gender  $(t_{(90)} = .069, p>.05)$ , the level of the institution which the participant works  $(t_{(90)} = .005, p>.05)$  and professional seniority year  $(F_{(2-89)} = .604, p>.05)$  are not significant in total and sub-factor score. According to their willingness to change profession variable, work satisfaction score of physical education teachers who does not request to change profession is high compared with the ones who request to change profession and the ones who are indecisive  $(t_{(90)} = -3.277, p<.05)$ . It is also found that the differences according to the same variable are not significant in total and other sub-factor score.

Conclusion: The result of the study indicates that quality of work life of participants is in medium level.

Keywords: Quality of Work Life, Physical Education Teacher

<sup>&</sup>lt;sup>1</sup> Celal Bayar University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Pamukkale University School of Sport Sciences and Technology

### OP. 418 RESTRUCTURING SCHOOL EXPERIENCE COURSE MATERIALS BY USING SOCIAL-ECOLOGICAL MODEL FRAMEWORK

Deniz Hünük<sup>1</sup>, Gökçe Erturan-İlker<sup>1</sup>, Osman Göde <sup>1</sup>

#### **Abstract**

**Objective:** In the educational reform process, teacher education programs have been restructured by The Council of Higher Education (YOK) in 1998 in Turkey. School Experience and Teaching Practice courses were integrated into teacher-education programs by YOK and the Ministry of National Education with the system of university faculty-school partnerships. The purpose of the School Experience course is to help teacher candidates to get acquainted with the school, pupils, and the teaching profession from various perspectives at an early stage in the program. However, recent research in Turkey indicates that there are some problems when implementing the School Experience course such as misunderstanding of required activities by teacher candidates and inadequate training (including materials such as observation tools, instructors manuals) (Asan, 2003). Therefore the purposes of this study were two-folded: (1) to restructure School Experience course materials for teacher candidates in physical education teacher education program and (2) to determine their experiences and opinions about content of the course.

**Method:** For the first purpose of this study, semi-structured individual interviews were conducted with ten senior students who were successful on this course before, two course instructors and two cooperating teachers to understand their previous experiences and opinions about the course content. Course materials (observation tools) have been restructured based on the analysis of the interviews. Observation tools have been introduced to teacher candidates, cooperating teachers and university supervisors before the semester started. For the second purpose of this study, portfolios of third year students' who have been enrolled to School Experience Course with new materials were examined and semi-structured individual interviews were conducted with five of them. Data were analyzed by using content analysis method.

Results: According to findings of the first research purpose, observation tools have been restructured by using Social-Ecological Model (SEM) framework based on the teacher candidates', course instructors' and cooperating teachers' recommendations and experiences. SEM is one of the ecological model that aims to improve various levels of individual, social and environmental variables. Basically, the model focuses on intrapersonel, interpersonel, organizational, community, physical environment and policy levels (McLeroy, 1988; Stokols, 1996). According to results of the second purpose of the study revealed that teacher candidates responded positively to newly developed course materials, their awareness increased in terms of different aspects of physical education in schools and they concluded that this experience will make positive contributions to their Teaching Practice course for the next semester.

Conclusion: As a conclusion, restructured School Experience Course materials based on stakeholders' (teacher candidates, cooperating teachers and university supervisors) needs was useful for teacher candidates and provides them with an opportunity to critique various perspectives of physical education in schools. However to reach all learning outcomes of this course, it is highly recommended to make all stakeholders aware of the content of the course and course materials and to make group discussions with teacher candidates under the supervision of instructor to talk about their reflections in each week.

**Keywords: Social-Ecological Model, School Experience Course** 

<sup>&</sup>lt;sup>1</sup> Pamukkale University School of Sport Sciences and Technology

## OP. 424 A PRELIMINARY VALIDATION OF THE TURKISH VERSION OF THE AUTOMATIC SELF-TALK QUESTIONNAIRE FOR PHYSICAL EDUCATION

Elif Nilay Ada<sup>1</sup>, Nikos Zourbanos<sup>2</sup>, Athanasios Papaioannou<sup>2</sup>, Zişan Kazak Çetinkalp<sup>3</sup>

### Abstract

**Objective:** The Automatic Self-Talk Questionnaire for Sports (ASTQS; Zourbanos, Hatzigeorgiadis, Chroni, Theodorakis & Papaioannou, 2009) is regarded as an effective instrument to determine the content and structure of self-talk in sport. Zourbanos (2013) emphasized that self-talk research in physical education is very limited. In a recent study, Zourbanos, Argyropoulou, Papaioannou, and Hatzigeorgiadis (2014) adopted the ASTQS in PE setting. In general, ASTQ-PE showed factorial and structure validity, as well as discriminant validity. To capture the self-talk of Turkish-speaking students the present study translated the ASTQ-PE into Turkish. Thus, the aim of this study was to examine the psychometric properties of the Turkish version of ASTQ-PE.

**Method:** A total of 387 students (197 girls, 190 boys) with a mean age of 15.12 years (SD = 2.14) participated in the study. The initial pool of the ASTQ-PE items was translated into Turkish by two bilingual sport psychologists. Back translation was conducted by two other bilingual sport psychologists. The original English version was then compared with the back-translated version. Where errors and discrepancies were identified, were corrected. Permission regarding the student's study participation was obtained from Provincial directorate for national education and head teachers. Students were assured that the questionnaires were anonymous and that the data would be used solely for research purposes. *Self-Talk in PE*. The ASTQ-PE (Zourbanos et al., 2014) was administered to assess students' self-talk. The instrument consists of 36 items assessing four positive (19 items) and three negative (17 items) self-talk dimensions. Positive self-talk consists of the dimensions of confidence (e.g., I can make it), anxiety control (e.g., Don't get upset), psych up (e.g., Do your best), instruction (e.g., Concentrate). Negative self-talk consists of the dimensions of worry (e.g., I am going to lose), disengagement (e.g., I want to stop), and somatic fatigue (e.g., I feel tired). Participants were asked to rate their frequency of self-talk on a 5-point scale (0 = never, 4 = very often).

**Results:** Based on Zourbanos et al's. (2014) results the irrelevant factor was excluded from the analysis. Furthermore, analyses showed that the error variances of six items showed high correlations with other error variances and were eliminated from further analysis. Furthermore Model fit was tested using chi-square statistic, comparative fit index (CFI), Tucker-Lewis index (TLI) and root mean square error of approximation (RMSEA). The Goodness-of-Fit Indicies showed a good fit for the revised 7-factor model with 30 items [ $\chi^2$  (df = 384) = 790.45,  $\chi^2$  / df = 2.06, CFI = .93, RMSEA = .05, TLI = .92]. The internal consistencies of the subscales ranged from .73 to .87.

**Conclusion:** The results show that the Turkish version of ASTQ-PE can be considered a valid instrument for the measurement of self-talk in physical education setting.

Keywords: Self-Talk, Physical Education, Validity

### OP. 441 EVALUATION OF CONSTRUCTIVIST APPROACH USED IN HIGH SCHOOL PHYSICAL EDUCATION COURSES IN TERMS OF GENDER

Zekeriya Çelik<sup>1</sup>, Bülent Ağbuğa <sup>1</sup>

#### Abstract

**Objective:** Ministry of national education developped programs based on constructivist approach in order to meet the needs of the age and find solutions to current problems since the academic year

<sup>&</sup>lt;sup>1</sup> Mersin University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> University of Thessaly Department of Physical Education and Sport Sciences

<sup>&</sup>lt;sup>3</sup> Ege University School of Physical Education and Sports

<sup>&</sup>lt;sup>1</sup> Pamukkale University School of Sport Sciences and Technology

2005-2006 to be implemented in all schools across the country (Arslan, 2007).

In constructivist learning envoironment, teachers should ensure free thinking, appropriate communication, regulations to diversity the students' assumptions and an open learning environment for students to be able to express their ideas and questions (Brooks ve Brooks, 1999). Constructivist approach has emerged as a new concept which is applied in Physical Education (PE) lessons. Researches has shown that social participation in PE classes has an enhancing effect on learning (Cothran ve Ennis, 1999; Ennis, 1999, Mosston, 1966). However, in our country, studies on evaluation of constructivist approach are limited and there isn't any study whether the teachers apply this method or not according to students' point of view in terms of gender. The aim of this study is to evaluate the view of graduated high school students regarding the application of constructivist approach in terms of gender.

**Method:** 548 students, 142 women and 406 men, who pre-registered to PAU School of Sport Sciences and Technology entry exam participated in academic year of 2013-2014 voluntarily in this study. Constructivist teaching practices inventory for students developed by Ağbuğa (2010) which consists of social cooperation, personel prevelance, games-skills sub-dimensions were applied. The inventory has 25 items with a likert-type scale which has 5 ratings. Cronbach Alfas using to determine the internal consistency were calculated 0,95 for general scale and other sub-scales (0,88 for pesonel prevelance and social cooperation and 0,89 for games-skills).

**Results:** According to Pearson's correlation analysis which was applied to understand whether each sub-dimension has a significant relation with each other. The result showed positive significant relationships among three sub-dimensions. Same results occured seperately for men and women as well. To examine the gender variable differences among all sub-dimensions, independent t-test was performed. According to t-test results, there is a significant difference only in "personal prevelance" sub-dimension between women (X = 4.06, X = 0.78) and men (X = 3.86, X = 0.75) (X = 0.05).

**Conclusion:** This results showed that physical education teachers were more concerned with the development of female students' personel prevelance sub-dimeonsion. Results of the study emerged that women and men students have different persfectives on constructivist approach. That's why, teachers should reshape their attitudes according to these differences.

Keywords: Constructivist Approach, Teaching Of Physical Education And Sport

### OP. 471 EXAMINATION OF VALIDITY AND RELIABILITY OF BASIC MOTOR SKILL TEST BATTERY ON AUTISTIC PEOPLE

 $\underline{\text{Gamze Beyazo}\underline{\text{glu}}}^1$ , Engin Uysal $^2$ , Fatih Bektaş $^1$ 

### **Abstract**

The purpose of this research is to determine the validity and reliability of the test battery which developing basic motor skills of autistic children. For this purpose, 42 people are participated who are diagnosed with autism disorder, are continuing to private education and rehabilitation center and are suitable to the pre-requisite skills which are described in order to participate in this study. 9 women and 33 men who are between 10-24 ages people are participated in this study. ( $X_{age}$  =12.11,  $S_{s}$ =2.71;  $X_{age}$  =13.87,  $S_{s}$ =3.73). At the beginning and the end of the study, developed in 2011 by Beyazoğlu G., Uysal E. and F. Bektas the basic motor skills test battery is applied to all participants. Battery is composed of 10 parts including general and special tests. General part; Directive test, Basic sports skills test, coordination test, psychomotor test, Special part; Gymnastics test, Bicycle test, Ping pong test, Tennis court test, Swimming test, Basketball test. All participants are joined all parts of the tests twice and gained 0-4 points from this tests. This points are arranged suitable to people who are required special needs and according to "cant do it", "can do it with

<sup>&</sup>lt;sup>1</sup> Karadeniz Technical University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Bizim Çocuklar Sports Training Center Special Children Sports Training

physical or verbal help", "can do it with physical help", "can do it with verbal help", "can do it". All participants are received the basic motor skills training for 16 weeks after they took pre-test. After 16 weeks, basic motor test is repeated. For validity of the battery, structure validity is examined. For reliability of the battery, difference between two tests are analyzed by t test in dependent groups and all differences are found between all applications at all parts of the basic motor skills test battery. (p<.05). To obtain internal consistency coefficients of basic motor skills test battery pre-test and final test, Cronbach alpha internal consistency coefficient method is used. Cronbach alpha internal consistency coefficients of this test is found as  $\alpha$ = .85. Referring Cronbach alpha internal consistency coefficients of all parts of the basic motor skills test battery, for directive test  $\alpha$ = .97, for basic sports skills test  $\alpha$ = .97, for coordination test  $\alpha$ =.94, for psychomotor test  $\alpha$ =93, for gymnastics test  $\alpha$ =.92, for bicycle test  $\alpha$ =.88, for ping pong test  $\alpha$ =.91, for tennis court test  $\alpha$ =.74, for swimming test a = .80, and for basketball  $\alpha = .91$ . Referring to the correlation values of pre-test and final test; for directive test r=.972, for basic motor skills test r=.946, for coordination test r=.883, for psychomotor test r=.931, for gymnastics test r=.916, for ping pong test r=.350, for swimming test r=.-172, for bicycle test r=.890, for tennis court test r=.179, for basketball test r=.692. Consequently; validity and reliability of basic motor skill test is high in autistic people and this test can be used to develop basic motor skills in autistic people at researches and applications.

Keywords: Autism, Motor Performance, Reliability, Validity

## OP. 478 FROM "TALKED ABOUT" IDEAS TOWARDS "ACTIONED" PRACTICES IN PEDAGOGICAL INNOVATIONS

Özlem Alagül<sup>1</sup>, Ferda Gürsel <sup>1</sup>

### **Abstract**

Objective: Towards the end of the twentieth century, Evans (1985) described physical education in his discourse that has existed in a time of 'innovation without change'. Three decades later, despite the wealth of pedagogical alternatives to traditional approach, the discourse of physical education has not changed (Kirk 2010). Pedagogical models are a "talked about' future, rather than an "actioned' present of pedagogical practice in physical education(Casey, 2013), and teachers have rarely moved beyond the honeymoon period when implementing them. Because teacher learning programmes were held one day workshops or studies that using teachers as a test pilots in one isolated studies (Ko et al., 2006), these have limited effect on changin practice (Goodyear, 2013). Innovation with change does not happen as a result of selling teachers good ideas or developing their understanding of pedagogical model (Goodyear, 2013). It is suggested that why pedagogical innovations has not been adopted by teachers is understood, teacher change process can be understood all the better (Bechtel and O'Sullivan, 2007). Starting from this, the aim was this study to explore teachers' perceptions on the process of learn and use Tactical Games Model, which was identified as the pedagogical innovation in primary Physical education lesson.

Method: Two primary school Physical Education teachers from a private school in Ankara used Tactical Games model (TGM) to teach physical education to grade 3 students for an academic year. Participatory action research (PAR) was used as the methodology to scaffold the inquiry and to support two primary school physical education teachers' learning and use of TGM during an academic year. PAR became a paradigm which emphasised the social nature of action research and encouraged dialogue and cooperation between practitioners, researchers and students, who could act as coparticipants. In other words, whilst action research can be conducted as an individual process, the development in one's knowledge, understanding and any change in actions are shaped by the social context and their social relations with others (Kemmis & McTaggart, 2008). In this regard, PAR used to present how teachers conduct TGM. Multiple sources of data informed the study including; professional learning meetings, pre-post teacher interviews, teacher post lesson reflections, researcher field notes. Data were subject to inductive analysis and constant comparison (Lincoln & Guba, 1985)

<sup>&</sup>lt;sup>1</sup> Ankara University Faculty of Sport Sciences

and key themes were drawn from this process. These themes were: change for teacher, extra-individual conditions, researcher/teacher collaboration.

**Results:** Researcher/teacher collaboration was a biggest factor for the adoption and use of pedagogical innovation, facilitating teachers' use of action research. Because teachers lacked experience in using model-based approach, they feel like they were "student" again. It is found that teachers' position changed as a provider of knowledge and instead gave students more opportunities to explore knowledge. Teachers mentioned that using TGM requires a higher degree of content knowledge and pedagogical content knowledge. The expectations on Physical Education lessons were emerged as a extra-individual constraints while teachers using TGM.

**Conclusion:** If physical education is to move beyond the traditional pedagogies and change "talked about" ideas to being "actioned" innovations, it takes time and researcher/teacher collaboration is a strategy that can start and support process.

Keywords: Pedagogical İnnovation, Teacher Change, Model-Based Practice, Participatory Action Research

#### OP. 489 THE ASSESEMENT OF RHYTHM SKILLS IN MIDDLE SCHOOLS STUDENTS'

Figen Altay <sup>1</sup>, <u>Suna Erel</u> <sup>1</sup>

<sup>1</sup> Hacettepe University Faculty of Sport Sciences

#### **Abstract**

The purpose of this study, middle school and studying in 5th and 6th grade students who participated in the contest of their sports skills according to the rhythm to determine whether there are differences between the scores. The research group studying two years at middle school of team that is active in 22 girls, 38 boys and 10 volunteer students who do active sports consisted of 70 students. Data collection Fichtner, (1995) "in a two-step rhythm test. This test Altay (2002) is adapted for this age group. Tested from 1 to 9 for the 1st phase of comprehension and recall, 10 "from 14" to step up the pace, maintaining, editing, endurance, jumping and space includes road tests. Test all 92 bpm tempo rhythm as determined using the metronome, made video recordings and computer environment by using headphones and Casio timepiece created for this age range were evaluated according to the scores. In analyzing the data, the measurement of the person and the person who made measurement reliability with others one-way repeated measures analysis of variance (ANOVA) was calculated intraclass correlation technique R: 0.80, R = 0.83 is reached. From the research group of the data mean and standard deviation calculated difference between the groups whether to test the "Analysis of Variance (ANOVA) test, which group differences due to to determine whether the" Dunnett's test "was applied. Students engaged in active sports in different sports rhythm skills found no significant difference in the values (F = 21.41, p < 0.05). Active in different sports that do not engage in sports and rhythm skills of students who participate in sports in the values for the significant difference was found in favor of the (F = 40.78, p < 0.05) Students engaged in active sports in different sports on rhythm skills found no significant difference compared to the control group (p <0.05). As a result, students are active in different sports, rhythm differences to be seen in terms of skills, rhythm skills students actively engaged in sports mean scores were higher than those doing sports, the sports media in the perception of rhythm are innate; for his work on the development of body awareness, body rhythm, rhythmic movement with awareness activities for adapting the co-factors may be.

Keywords: Rhythm Skills, Rhythm Perception, Rhythm And Children

## OP. 490 THE EFFECTS OF DIRECT TEACHING MODEL IN CHESS TEACHING ON COMBINATION SOLVING SKILLS

Figen Altay <sup>1</sup>, <u>Kübra Öztürk</u> <sup>1</sup>

#### **Abstract**

The purpose of this study was to effects of direct teaching model in Chess combination solving skills. The research group studying one year Chess school of team that is active in 3 girls, 17 boys who do active sports consisted of 20 students. During the data collection process, the Game scenario developed by Mitchell, A.S., Oslin, L., Griffin, L. 2005 was adapted to chess and the information was collected according to the scenario skills assessment scale. The research group had five weeks chess training based on direct teaching model. In order to balance the equivalence of the group during the data analysis, beginner and intermediate level of chess test has been made. The arithmetical average and standard deviation of the acquired data has been calculated and the normal distribution of the groups has been shown by the One-Sample Kolmogorov-Smirnov test. According to the statistical analyze that there has been found significant difference between the first-final test results of the sample tests of game scenario study and Wilcoxon (p<0.05). There has been found significant difference in game performance points between Wilcoxon and the combination scenario applied group (p<0.05). While, according to the permanence test of combination solving skills applied group, there has been found significant difference in discovered check, back-rank mate, double attack, Bh2 and Bh7 sacrifice(p<0.05), there was no difference in smothered mate (p>0.05). As a result, we can say that the direct teaching model of the scenario learning shows some difference in combination solving skills, but when we look at the permanence test results we see that the direct teaching model has no impact. The reason for this is, while we can talk about one type situation in psychomotor skills, in an intellectual skills like chess, there is always a progress because of the versatility situation.

Keywords: Direct Teaching Model, Combination Solving in Chess, Permanence

# OP. 518 SELECTED SKILLS TRAINING AREA VOCATIONAL EDUCATION EXAMINATION RESULTS OF INVENTIGATION OF PHYSICAL EDUCATION MUSIC AND ART TEACHERS EPISTEMOLOGICAL BELIFS

Osman Göde<sup>1</sup>, Gülen Vural <sup>2</sup>, Yakup Topcan <sup>1</sup>, Tevfik Akol <sup>1</sup>, Cüneyt Dev <sup>1</sup>

#### Abstract

In this study, physical education, music and art teachers' total 179 units of epistemological beliefs of some variables (gender, age and professional form) were examined. The research method which was used is the survey scan model with a subrelation scan method. İs this study, epistemological beliefs are depicted in terms of the variables and then examined the relationship between these variables. The universe of this study is secondary and high schools which are in the district of Denizli Province Central. The universe of the study is the teachers (physical education, music and art teachers) in these schools were selected through random cluster sampling. The epistemological beliefs scale and personal information from which was developed by Deryakulu, Büyüköztürk (2002) the Epistemological Beliefs Scale (ECO) is used for collection of data. Physical education teachers' epistemological beliefs doesn't differ according to some variables emerged. The only difference has been observed that the belief that learning depends on ability. This belief is more common among male teachers that female teachers. In the study of music teachers believe epistemological generally differ according to some variables that have emerged. The study has revealed that the epistemological beliefs of the art teachers don't range generally according to some flexibles. The difference is the

<sup>&</sup>lt;sup>1</sup> Hacettepe University Faculty of Sport Sciences

<sup>&</sup>lt;sup>1</sup> Pamukkale University Faculty of Sport Sciences

<sup>&</sup>lt;sup>2</sup> Adnan Menderes University School of Physical Education and Sports

belief that learning depends on the talent and there is only one truth.

Keywords: Physical Education, Sports Training, Sports, Music, Pictures

### OP. 530 OPINIONS AND PRACTICES OF THE INSTRUCTORS ON ASSESSMENT AND EVALUATION

Hidayet Suha Yüksel<sup>1</sup>, Nevin Gündüz <sup>1</sup>

<sup>1</sup> Ankara University Faculty of Sport Sciences

#### **Abstract**

**Objective:** The purpose of this study is to investigate instructors' opinions on assessment-evaluation and the techniques they use in their own courses using qualitative and quantitative methods. These instructors work in the Physical Education and Sports Sciences Department of three different universities located in Ankara.

**Method:** In the first part of the research, with a prepared by researchers measurement tool, the instructors' levels of participation about the necessities of modern assessment-evaluation and their own techniques were tried to be identified by a survey. In the second part, their opinions on educational assessment and evaluation were examined in more detail through structured interviews. The Cronbach's Alpha reliability coefficient of the prepared survey was measured as 0,76. The participants were 61 instructors from three different universities and they participated in the study voluntarily. Moreover, structured personal interviews were held with 27 instructors. The statements with which the instructors agreed most were identified by calculating mean and standard deviation in the analysis of the survey questions. For the analysis of the quantitative data, SPSS 21 Pack was used. As for the qualitative data, content analysis research method was adopted.

Results: According to the surveys, the most agreed statements on assessment-evaluation for the instructors are; "Any prejudices should be avoided during the evaluation of students in class." (Mean±Sd: 4,87±0.33), "The assessment-evaluation technique should be suitable to make a multipurpose measure of the students' success." (Mean±Sd: 4,73±0.48) and "the most appropriate assessment and evaluation method should be adopted according to the properties of the course." (Mean±Sd: 4,68±0.46) The statements with which the instructor agreed least are "The courses offered in schools to improve the quality of assessment and evaluation are sufficient." (Mean±Sd: 2.50±1.11), "Apart from the personal evaluations, there should also be group evaluations." (Mean±Sd: 3,98±0,91) and "To be able to evaluate students more effectively, alternative evaluation techniques should be searched for and tried to be implemented." (Mean±Sd: 4,26±0,74). It is identified that while the most common method these instructors use in their theoretical courses is the "multiple choice test" (f: 39) and "open-ended questions" (f: 35), for the practical courses the most common method is "skill tests" (f: 26) and "performance assessment" (f: 19). According to the results of the qualitative data analysis, the opinions of the instructors on assessment and evaluation are interpreted under three main titles; (1)"the significance and contributions", (2)"difficulties" and (3)"techniques and their effects". The findings obtained from these titles are important to determine to what extent instructors reach the assessment-evaluation goals. They are also significant for teachers to evaluate both the student and himself; and owing to the evaluations they made, it can be possible to identify the problematic points, to revise the programs, methods and plans accordingly and to improve the quality of education. The difficulties experienced during the implication are different from one instructor to another; but there are some common problems such as negligence of students towards some homeworks and projects, tendency to cheating, lack of time and crowded classrooms. Instructors generally benefit from the techniques like homeworks and projects apart from the classical evaluation techniques; some of them think that these techniques are useful while some think they don't achieve their goals because the students don't care the new techniques enough. As for the techniques instructors use and their justifications; the ones who use open-ended questions think that the other exam types measure direct knowledge which is based on memorization. Long answer questions require students to have more advanced mental skills and these exam types are able to show that whether the student has the knowledge or not. According to the instructors who prefer techniques such as multiple questions, fill in the blanks, true or false; these types of questions provide more objectivity no matter what and students are used to these ones more than any other question type.

**Conclusion:** As a result, it can be concluded that instructors adopt the goal and significance of assessment and evaluation; and because of the practice difficulties and their viewpoints they prefer different but generally classical assessment and evaluation techniques; and also they don't use alternative assessment and evaluation techniques sufficiently.

**Keywords: Assessment, Evaluation, Instructor** 

## OP. 531 THE STUDY OF CANDIDATE TEACHERS' VIEWS ON THE USE OF INCLUSION STYLE IN PHYSICAL EDUCATION CLASSES

Hidayet Suha Yüksel<sup>1</sup>, Ferda Gürsel <sup>1</sup>

<sup>1</sup> Ankara University Faculty of Sport Sciences

#### **Abstract**

**Objective:** Approaches on teaching in physical education first emerged as a spectrum of teaching styles by Mosstan (Tannehill et al 2013) Inclusion style (E style) which is one of the teaching styles present in Mosstan's spectrum, is a style that increases the students' participation (inclusion) in classes and is effective especially in heterogeneous groups. The aim of this study is to study the physical education teacher candidates' views and thoughts on classes they have with inclusion style. It was found in the needs analysis at the beginning of the class that the physical education teacher candidates at the faculty do not usually prefer inclusion style in teaching training classes and they do not know the method well. When the literature is studied, it is seen that the inclusion style preferences of physical education teachers and teacher candidates both abroad and in our country is of medium level. (Ince and Hünük, 2010; Şirinkar and Ercis, 2007; Hein and Dioj, 2012; Saraç and Muştu, 2013; Cengiz and Serbes, 2014). In the studies carried out, the reason for such a preference of teachers is that they see physical education classes done with instruction, exercise and pair work method as more fun, helpful for learning and more motivating (Saraç and Muştu, 2013; Cengiz and Serbes, 2014) and that physical education classes are carried out with a focus on motor skills. (Jaakkola and Watt, 2011)

**Method:** The study was carried out in Ankara with 4 male physical education teacher candidates who had teacher training at the Department of Physical Education and Sports. The study comprises the preparation and practice of lesson plans with inclusion style during the tenth and eleventh weeks of teaching practice. In this study used qualitative research method, structured individual interviews, focus group discussions and video recording were used as data collection methods Data was analysed using the content analysis method of qualitative analysis.

**Results:** The data obtained as a result of the analysis were classified under the themes (1)"individual differences", (2)"activities in different levels" and (3)"the student's own choice". The data obtained Show us that when motivated to use inclusion style, teacher candidates increased their awareness in the following areas: determining levels based on students needs, letting the students choose the constructed levels and the learning speed and performance of each student is different.

**Conclusion:** As a result, it can be said that it is easier for candidate teachers to become aware of the characteristics of different styles if they are motivated to use styles other than the ones that they are used to.

**Keywords: Candidate Teacher, Teaching Styles, Inclusion Style** 

# OP. 544 THE SPORTS THESIS IN TURKEY, THEIR INVESTIGATIONS OF FIELD, METHOD AND ANALYSIS TECHNIQUES

Cenk Temel <sup>1</sup>, Mehmet Kartal <sup>2</sup>, Zekai Pehlivan <sup>3</sup>, Aysel Namlı <sup>1</sup>

### Abstract

**Objective:** Scientific research, uses scientific methods to understand science, explaining it and controlling functions in line, with data collection, analysis and commentary on the specific procedures. Therefore, the scientific methods used in research, is important to reveal the correct form of the research results. Hence, the aim of this research; is to examine that the master's and doctoral thesis in the field of sports, in terms of methods and analysis techniques that prapared in Turkey.

**Methods:** In the research, it have been used of qualitative research methods for document analysis techniques. Document analysis, investigation targets of written materials containing information about the case or cases and it covers analysis that commonly used in qualitative research are important sources of information. To obtain survey data, the Higher Education Authority's (HEC) National Thesis Center's in the Internet and through open access, a total of 802 thesis (74.3%, n = 596 master's degree, 1.6%, n = 13 medical specialization and 24.0%, n = 193 doctoral) in the title of "Sports" were examined between the yaers of 2010 - 2014. For this reason, each identified are encoded in the Excel program by researchers that will examine the extent of the thesis. At the end of the study, the frequency percentage and frequency of data were analyzed by making calculations.

**Results:** Accordingly, 88.4% of thesis sports title in the quantitative, 8.9% of in the qualitative and 2.7% of these in the mixed research methods is used, each of these methods, as well as a method that utilized multiple techniques, 48.8% of quantitative methods of the arguments used in the t test, the average of 39.6%, 37.5% in the percentage and frequency, which analyzed using ANOVA test at 16.6%; used qualitative methods in 73.6% of the thesis document analysis, interviews in 50.0% and 13.8% of the semi-structured interview technique was used; 42,1% of the training science thesis topic,% 28,4 of sports training, sports management 24,3% and 1,1% of the recreation, the other areas of 4,1%, which is the language used and it was determined that nearly 97.2% of them are all Turkish.

**Conclusion:** According to the findings, in our country, master's and doctoral thesis of sports field, are used mostly quantitative research methods; analysis techniques were similar, and research topics mainly training science is in the area, and it can be said that the number of thesis that have been prepared by a foreign language is too low.

Keywords: Sport Thesis ,method and Analysis Techniques

# OP. 546 EXPLORATION OF INFLUENCES OF AN AWARENESS DEVELOPMENT PROGRAM ABOUT PEOPLE WITH INTELLECTUAL DISABILITIES E ON THE ATTITUDES OF SECONDARY SCHOOL STUDENTS

 $\underline{\operatorname{Elif}\,\operatorname{Lermi}}^1$ , Dilara Özer $^1$ , İlk<br/>nur Hacısoftaoğlu  $^1$ 

### Abstract

**Objective:** Attitude of individuals is formed with organization of experiences and knowledge she/gets. Attitude, changing in accordance with the changes in experiences and knowledge, consists of three elements as cognitive, emotional and behavioural. These three elements always interact with each other. Thus a change in one of them leads change in others accordingly (İnceoğlu, 1993:19). Özyürek (2013) puts emphasize on the importance of positive interaction on emotional dimension of negative attitudes and being informed on belief dimension of negative attitudes. According to Karatepe and

<sup>&</sup>lt;sup>1</sup> İnönü University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Adıyaman University School of Physical Education and Sports

<sup>&</sup>lt;sup>3</sup> Mersin University School of Physical Education and Sports

<sup>&</sup>lt;sup>1</sup> Gedik University Faculty of Sport Sciences

Atalay, for children with normal development and children with special needs, to work and play together make influences on their socialization and creates interest, and courage. Moreover these skills change their next life (Öztürk, 2013). In this study, it is aimed to explore the influence of a program to develop awareness about people with intellectual disabilities on seventh grade students.

**Method:** The study was conducted in Cemile Çopuroğlu Secondary School in Istanbul Pendik with 30 students (18 male and 12 male). The program was carried out once a week for two hours during six weeks in 2013-2014 fall term. Program includes visits to special education institutions and participation in physical activities as well as general information about individuals with disabilities. After each activity, feedback was gotten from students and tried to be made sense of activities through discussions. In the spring term of 2013-2014 academic year, the study was conducted and data was gathered by focus group interviews which is one of the data gathering techniques in qualitative research methods. Data obtained from five groups, each including six students, was analysed with grounded theory.

**Results:** Four themes was derived from the analyses; contributions of the program, the most impressive dimension of the program, the views about intellectual disability people in the society, and message for the society. The theme of contributions of the program was divided into eight sub-themes as terminology, getting informed about disability groups, interpretation of past living, communication, defending of disability rights, empathy, protecting the disabled friends, destruction of prejudgements. The most impressive dimension of the program was divided into three sub-themes as contact, efforts for succeeding something and successes. Approach of people to individual with disabilities is divided into three sub-themes as well; labelling, kidding and, fear and exclusion.

Conclusion: As a result of the research it was seen that, the program influenced participants in all three dimensions of attitude; cognitive (e.g. terminology, informed about disabled groups, interpretation of past living), emotional (e.g. empathy, destruction of prejudgements) and behavioral (e.g. communication, defending of disabled rights). The most impressive activities were activities based on contact as it was stated in many different studies (Baran et al. 2009; Panagiotou et.al. 2008; Xafopoulos, Kudlacek, and Evaggelinou 2009), and observation of efforts people with disabilities make and their achievements. These result shows that to plan and extend programs including observation and interactive activities will be beneficial for development of awareness regarding people with disabilities in the society.

**Keywords: Mental Retardation, Attitude, Awareness** 

# OP. 564 EXAMINING THE RELATIONSHIP BETWEEN THE ATTITUDES OF TEACHER CANDIDATES OF PHYSICAL EDUCATION TOWARDS TEACHING PROFESSION AND THEIR LEVELS OF OCCUPATIONAL ANXIETY

A.Meliha Canpolat  $^1$ , Olcay Kiremitci  $^1$ , <u>Lale Yıldız</u> $^1$ 

<sup>1</sup> Ege University School of Physical Education and Sports

### **Abstract**

**Objective:** In this study, it was aimed to determine the attitudes towards teaching profession and the levels of anxiety of teacher candidates receiving education in the department of physical education and sports, and it was aimed to reveal the possible relationship between their attitudes and level of anxiety. **Method:** Survey method was used in obtaining the data employed in this study. A total of 298 students of the departments of Physical Education and Sports from four different universities (Ege University, Celal Bayar University, Muğla Sıtkı Kocaman University and Akdeniz University) were voluntarily included in the study, 123 of whom were females (41.3%) and 175 of whom were males (58.7%). In the evaluation of the data "The Occupational Anxiety Scale" and "The Teaching Profession Attitude Scale" were used. The descriptive statistics of the changes taken as basis in the study as statistical analysis, t-test depending on average differences and canonic correlation analysis were benefited from.

Results: In view of the obtained data, the attitudes of teacher candidates of physical education

department were evaluated to be positive with the average score of 140.06. As the result of the performed analyses, when the sub-dimensions of occupational anxiety and the attitude scale of teaching profession were evaluated according to the gender, it was found out that there is a significant difference only in the sub-dimension of appointment (t= -3.30, p<.01). Accordingly, the average scores in anxiety centered on appointment of male teacher candidates of physical education who participated in the study were found to be statistically significantly higher than female teacher candidates of physical education. When the relationship to come out is examined between the subdimensions of occupational anxiety scale and teaching profession attitude scale, the first (r = .426) and the second (r = .298) canonic functions of the obtained three canonic functions were found to be statistically significant (p<.01). Within the frame of significant first canonic function, it was determined that the adaptation centered anxiety sub-dimension of occupational anxiety (canonic loading = -.778; cross loading = -.331), and love sub-dimension of teaching profession attitude subdimension (canonic loading = -.967; cross loading = -.412) came to the forefront. Within the frame of second significant canonic function, it was found that economic/ social centered anxiety subdimension of occupational anxiety sub-dimension (canonic loading = .558; cross loading = .166), and value sub-dimension of teaching profession attitudes sub-dimension (canonic loading = -.812; cross loading = -.242) came to the forefront.

Conclusion: When they obtained data is evaluated it can be thought that the significant high level of the appointment-centered sub-dimension of male teacher candidates of physical education has resulted from the pressure as a result of the mission and vision imposed on men by public opinion. Another result is the opinion that the environmental conditions that teacher candidates of physical education perform their professions can directly affect the love and loyalty to their profession. Nevertheless, physical education teacher candidates can think that social value perception of teaching profession may disappear when they can't reveal their abilities because of physical and cultural circumstances that they will work.

Keywords: Attitude, Anxiety, Physical Education Teacher Candidates

# OP. 565 THE RELATIONSHIP BETWEEN DISPOSITIONAL FLOW, MOTIVATIONAL CLIMATE, AND SELF-TALK IN PHYSICAL EDUCATION CLASSES

Elif Nilay Ada<sup>1</sup>, Nikos Zourbanos<sup>2</sup>, Zişan Kazak Çetinkalp<sup>3</sup>, Athanasios Papaioannou<sup>2</sup>

### Abstract

**Objective:** The purpose of this study was to examine the relationships between dispositional flow state, motivational climate, and self-talk in physical education lessons. Furthermore, differences between gender, classes, sport or non-sport levels, and sport participation were also examined.

**Method**: The sample comprised of 318 male ( $M_{age}$ = 13.18 SD= .77) and 330 female ( $M_{age}$ = 13.23 SD= .73), totally 648 secondary school students (Mage=13.20 SS=0.75), who voluntary participated the study. Participants completed the "Learning and Performance Orientation in Physical Education Classes Questionnaire", "The Automatic Self-Talk Questionnaire for Physical education (ASTQ-PE), and "Physical Education Dispositional Flow State-2 (Loss of Self-Consciousness, Unambiguous Feedback, Action-Awareness Merging)".

**Results:** *Preliminary results;* Pearson correlations revealed low to moderate negative relationships between negative self-talk subscales (worry, disengagement, somatic fatigue) and dispositional flow subscales in physical education ranging from -.17 to -.41 (p<.001) and low to moderate but positive relationships between positive self-talk subscales and dispositional flow subscales ranging from .18 to .42 (p<.001). Regarding motivational climate the results revealed low relationships between motivational climate subscales and self-talk except of the subscale of student learning orientation

<sup>&</sup>lt;sup>1</sup> Mersin University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> University of Thessaly Department of Physical Education and Sport Sciences

<sup>&</sup>lt;sup>3</sup> Ege University School of Physical Education and Sports

which revealed low to moderate relationships. Independent sample t-test results revealed that girls obtained significantly higher scores than boys only in the subscale "worry about mistakes" (p<.01) in motivational climate. Furthermore, analyses showed that there were no significant differences in terms of gender in DFS-2 subscales. On the other hand, girls obtained higher scores than boys in negative self-talk dimensions, while boys obtained higher scores than girls in positive self-talk dimensions. In terms of grade level, students in 8 grade level obtained lower scores than 6 and 7 grade level in perceived learning climate, while students in 8 grade level obtained higher scores than 6 and 7 grade levels in perceived performance climate. Findings related to self-talk, students in 8 grade level obtained higher scores than 6 and 7 grade levels in worry, disengagement and somatic fatigue dimensions. Furthermore, students that were doing sport activities (sports) obtained higher scores than students that didn't do any sports (non-sports) in both three subscales of dispositional flow state and positive self-talk dimensions. Conversely, "non-sports" obtained higher scores than "sports" in negative self-talk dimensions. Finally, regarding level of sport participation it was revealed that in individual sports participants obtained higher scores than in team sport in positive self-talk dimensions. Main analysis; Seven hierarchical regression analyses were performed to examine the effects of dispositional flow and motivational climate on students' self-talk. In step 1 of the hierarchical regression revealed that unambiguous feedback significantly and negatively predicted worry  $\beta$ = -.33, p < .001. In Step 2 worry about mistakes accounted for a significant proportion of further variance in worry,  $\beta$ = .29, p < .01. Similar results were revealed for disengagement and somatic fatigue. Regarding the positive self-talk dimensions, only unambiguous feedback significantly predicted psych up ( $\beta$ = .24, p < .001) and anxiety control ( $\beta$ =.23, p<.001) respectively. Whereas for the other 2 positive self-talk dimensions unambiguous feedback in step 1 and students' learning orientation in step 2 accounted for further variance in confidence and instruction respectively.

**Conclusion:** Overall, the results of the study having shed some light on the nature of the relationship between dispositional flow, motivational climate and students' self-talk, may help the better understanding of the self-talk in physical education and guide further research regarding antecedents of self-talk in physical education settings.

Keywords: Perceived Motivational Climate, Dispositional Flow State, Self-Talk, Physical Education

### OP. 570 THE DRAW A PHYSICAL EDUCATION LESSON

Cenk Temel<sup>1</sup>, Mehmet Güllü <sup>1</sup>

### Abstract

**Objective:** This study was carried out in order to define the images related to physical education lesson of the students aged 11-12 as it is the age to start the physical education lesson by the physical education teacher.

**Methods:** The qualitative research methods were adopted in this study. The research group includes 691 students aged 11-12 from 10 different cities in Turkey. The students were given papers in A4 size and asked to draw "a physical education lesson" without any explanation. The frequency and percentage of the main themes and related images were taken from the drawings collected.

**Results:** In the result of the research, 12 main themes (sports branches, sports techniques, sports clothing, sports equipment, drawing moment, mood, the physical education teacher, environment, trademark, the student genders, the conversations) were defined. The sports branches are mainly football, basketball, volleyball and badminton (f=902, %73,16), the sports techniques as passing, chute, dribbling (f=534, %96,04) and other (f=22, %3,96). The mood drawn in the paintings are especially happy face images (f=604, %90,28), the environment as sun (f=171, % 31,73), clouds (f=167, 30,98), birds (f=28, 5,19), trees (f=50, %9,28), school building (f=38, %7,05) and other (f=43, %7,98). There are 4351 human figures (1221 female, 3130 male) in the drawings. It was observed that few physical education teachers (f=85,% 12,30) were drawn in the pictures.

**Conclusion:** In the research, it was observed that the students perceived the physical education as a

<sup>&</sup>lt;sup>1</sup> İnönü University School of Physical Education and Sports

sport lesson and the same sport branch repeated in terms of its content continuously in different schools of Turkey. And also it was significant that the sports techniques show similarities. It was identified with the feeling of success/wining and the feeling of happiness of physical education lesson as positively. The students painted especially male pictures and draw girls and boys in separate groups. It could be said that the physical teacher was invisible in the pictures.

Keywords: Physical Education Lesson, Student, Drawing

# OP. 573 A STUDY UPON THE EXPECTATIONS AND THE REASONS OF ATHLETES TO START THE GYM PARTICIPATING IN EUROPEAN CROSS COUNTRY CHAMPIONSHIPS

### Metin Bayram<sup>1</sup>

<sup>1</sup>Ağrı İbrahim Çeçen University School of Physical Education and Sports

#### Abstract

**Objective:** The purpose of this study is to define the factors that lead the athletes to sports who participate to European Cross Country Championships from various countries and their expectations from sports.

**Method:** Research data was gathered by using questionnaire technique. Within this purpose, a questionnaire that was developed by Sunay et al. in 1996 was applied. The questionnaire was applied to the athletes in European Cross Country Championship after applying it to the field of athleticism in a national competition and getting feedback from the experts. The validity and reliability of the questionnaire was approved as alpha ( $\alpha$ =0.820) by applying to 72 athletes via reliability analysis technique. The study was made in the season of 2012 – 2013. 175 athletes who participated in European Cross Country Championship held in Serbia constitute the nature of the study and the sample of the study consists of 126 athletes to whom the questionnaire was applied (81 of whom are male and 45 of whom are female athletes). The data, frequency and statistics gathered from the questionnaire were explained and comprehended. Furthermore, within the aim of defining whether there is a meaningful difference between the opinions about the sex, age, sponsor support, education levels and countries of the athletes, t-test and one-way variance analysis were utilized.

Results: When they are evaluated in terms of sex, the rate of male athletes is higher than the one of female athletes in terms of the effect of family support in leading to sports and moving with their friends in a team spirit. This rate is meaningful statistically (p<0,05). As to the effect of environment in leading to sports, it is detected that the rate of being sponsored by company/club is higher. As to the evaluation of moving with friends in a team spirit between Turkish and European athletes, it is seen that the level of Turkish athletes is higher than the one of European athletes and that there is a meaningful difference between them statistically (p<0,05). As to the evaluation in terms of achieving financial opportunities, it is seen that the level of European athletes in choosing athleticism is higher than Turkish athletes. As to the evaluation of the level of making use of athletes' spare time by doing sports, it is seen that the level of individuals 20 aged or under is higher; however there is a decrease in this level with the increase in age and it is detected that the difference between them is meaningful statistically. Furthermore, it is found out that Turkish athletes prefer and head for the field of athleticism rather than European athletes at a higher rate in terms of leading and living a healthy life, having a good physical appearance and becoming a trainer in future.

Keywords: Athleticism, Expectations From Sports, Sportive Orientation

### OP. 581 A DIGITAL MOVEMENT IN THE WORLD OF INACTIVE CHILDREN: THE EFFECTS OF ACTIVE VIDEO GAMES ON PROMOTING PHYSICAL ACTIVITY\*

 $\underline{\text{Dilşad Coknaz}}^1$ , Ayşe Dilşad Mirzeoğlu $^1$ , Seval Alkoy $^1$ , Hakkı Çoknaz $^1$ , Halil İbrahim Atasoy $^1$ , Kemal Göral $^2$ 

### **Abstract**

**Objective:** Experts have constantly been seeking for new instruments related to the generalization of physical activities. The most remarkable instrument is the application including beneficial transportation of the technology which is also known for its negative effects on inactive life style to occur. This new creative form of video games is expected to create motivation possible to remove negations and obstacles regarding natural physical activities (Russell,2009, Hansen and Sanders, 2010), to be encouraging for canalizing children being less active and more overweight to physical activities (Foley and Maddison, 2010; Murphy, 2010). The aim of this study was to investigate the effects of active video games (AVG) on enjoying physical activities and the physical fitness parameters and to determine the views of the children and parents about AVG practises, which are foreseen as a probable alternative solution to generalize physical activity among 9-12 years old children both being inadequate in terms of physical activity and interested in technology.

Method: In this study both qualitative research for determining views and suggestions about AVG and the true experimental design including pretest-posttest with control group method were used. 113 students, who lived in Bolu and studied on primary and secondary school, were between 9-12 years old, participated in this study. Experiment group involved 53 (30 girls, 23 boys); control group involved 60 (35 girls, 25 boys) of the students. Students in experiment group played AVG for 45-60 minutes three times in a week during 12 weeks. Parents of the students in experiment group were present for the qualitative section of the study. Turkish version of 5 points "Physical Activity Enjoyment Scale-Short Form" which was modified by Graves et al (2010) was used to collect the data. Cronbach alpha coefficient of Turkish version was .711 (Mirzeoğlu and Çoknaz, 2014). Body lenght and weight, body-mass index, subcutaneous fat, body fat percentage, body density and reaction time of the children were measured as physical fitness parameters. Body weight was measured by means of balance having 0,1 kg precision and body lenght was measured by means of electronic lenght measuring device having 0.01 cm precision. "Body weight / length (m)<sup>2</sup>" formula was used to determine body-mass index (Tamer, 2000). Subcutaneous fat, Biceps, Triceps, Suprailliac and Subscapula skinfold thickness was measured by means of skinfold caliper device with Holtain device. Siri formula was used to measure body fat percentage. Body density was measured by means of Durnin-Womersley formula (Günay et al, 2006). Newtest 1000 device was used to measure visual and auditory reaction time of experiment and control group. In additition, focus group interviews were carried out to determine the views about AVG's. Children were interviewed on 6th and 12th weeks, parents were interviewed on 6th week. Descriptive statistics and independent samples t test tecniques were used in quantitive data and significance level were determined as 0.05. Content analysis was practised by means of NVIVO 10 programme in the sections including qualitative method.

**Results:** A. Physical Activity Enjoyment Level: Study result showed that students participating the study enjoyed Wii aerobic the most  $(50,86\pm7.97)$ , Wii Sport the less  $(27.68\pm5.61)$ . When enjoyment level from game categories according to gender was compared, significant differences appeared in only Wii Aerobic group game in favour of girl students.  $(t_{(51)} = 3.285, p=.002)$ . B. Physical Fitness Parameters: When posttest weight, length and body fat percentage of the children in experiment and control group were compared, no statistical differences were found out between two groups. However, a significant difference was found in dominant hand visual reaction  $(t_{(111)} = -2.745, p=.007)$ , nondominant hand visual reaction  $(t_{(111)} = -3.304, p=.001)$ , dominant hand auditory reaction  $(t_{(111)} = -2.650, p=.009)$  in favor of experiment group C. Evaluation of the views about AVGs: AVG practices have a positive effect on

<sup>&</sup>lt;sup>1</sup> Abant İzzet Baysal University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Muğla University School of Physical Education and Sports

physical change, physical activity, socializing, intellectual and individual improvement. Parent's views showed that AVGs created a change in the relationship between children and screen devices. Although AVG generally created a positive feeling on children, it occasionally created negative feeling on children according to the game types. That the game is perceived as feminine or masculine is one of the factors affecting its enjoyment level. Students' positive feeling, achievement and relations with the games figured out that they were in an endeavor to transfer what they learned through AVGs into their normal living.

Conclusion: Study results revealed that children playing AVG generally enjoyed physical activities. Likewise, quantitate results demonstrated that children and parents perceived physical change. Additionally, it was seen that while reaction time of the children in experiment group participating AVGs decreased, there was no change in their weight, length and body fat percentage. Consequently, AVGs can be used as an effective instrument to canalize children being inactive and keeping up with technology highly to physical activity.

\*Bu araştırma Abant İzzet Baysal Üniversitesi Bilimsel Araştırma Projeleri tarafından desteklenmiştir. **Keywords: Physical Activity, Active Video Games, Inactive Children** 

## OP. 582 THROUGH THE EYES OF THE STUDENTS: PHYSICAL EDUCATION AND SPORT COURSE AND PES TEACHER

Gülsen Özcan <sup>1</sup>, <u>Ayşe Dilşad Mirzeoğlu</u> <sup>1</sup>, Dilşad Çoknaz <sup>1</sup>

#### Abstract

**Objective:** A student who is not getting bored with school, the course and the teacher still is a dream of teaching programs. If the persons or elements who have direct or indirect impact on teaching-learning processes create expectations from each other or if they approach students who really want to learn other than finding excuses in accordance with the pragmatic philosophy then it would be possible to reach more accurate solutions. Researches and findings of each disciplinary area within their borders will improve the quality of the student who will be studying in that area. Although the opinions and suggestions of students who are one of the most important elements of the school system in preparation of the curriculum programs are crucial in theory, they are generally neglected in practice. Therefore, the aim of this study was to determine the views of the secondary and high school students about what kind of PES class they want to have, characteristics of physical education and sport teachers and the expectations of them.

**Method:** Qualitative research methods and phenomenology model were used in this research. The participants of the study were secondary and high school students who were attending classes in the spring semester of 2013-2014 academic year in the central district of Bolu. Data was collected through focus group interviews and a questionnaire with open-ended questions. In this study four focus group interviews were carried out consisting of 5-6., 7-8., 9-10. and 11-12. classes. A total of 32 students took part in focus groups. The other data collection method was an open-ended questionnaire. It consisted of six open-ended questions and was filled by 196 secondary school students and 202 high school students. Content analysis was used to analyze the data. The data obtained from the focus groups was transcribed into a Word document. In addition the data obtained from the open-ended questionnaire was transformed into data set in Excel. Consequently data was transferred into NVIVO 10 software.

**Results:** The featured answer of male students of 5-8th classes to the question "What would you like to do in PES class?" was "team sports" and of the female students it was "playing games". "Being free during the course" was the third option for both genders. To the same question the first choice of both female and male high school students was "being free during the course", the second choice for male students was "team sports" and for female students it was "playing games". Unlike secondary school students, high school students emphasized also a desire to learn different sports activities in PES courses. To the question "Which factors are effective for participating in the PES course?" female students answered "fun" and male students answered "type of activity". Secondary school male

<sup>1</sup> Abant İzzet Baysal University School of Physical Education and Sports

students stated "teammates" and female students stated "interesting activities and activities that they would voluntarily participate in" as the third theme for this question. In the high school level the answers to the same question from female students were "fun", "skills and abilities" and "attitudes of teacher" respectively. Among the high school male students the most important factors affecting participation in PE courses were "type of activity" and "interesting subject". The third question was "According to you, how a physical education and sport teacher should be?", and the answer to this question was clearly "a teacher who gives us free time" for the secondary school students. Furthermore, the students also expect to have "a teacher who let them play games and a teacher who entertains" in the course. For male students in this group "a teacher who gives students free time" was primary while for female students "a teacher who entertains" was primary. The situation was similar for the high school students and for male students "a teacher who gives students free time" and for female students "a teacher who entertains" as primary perceptions. In addition, according to the answers of the female high school students "a teacher who is not forcing" was one of the notable themes.

Conclusion: As a result female students in secondary school stated that they mostly want to play games while male students stated that they want to have team sports in PES courses. On the other hand, high school students emphasized that they want to be free in PES courses. For both secondary and high school female students the most important factor affecting participation in PES courses was doing enjoyable activities, for the male students however it was the type of activity. According to the participants of the study the physical education and sport teacher should be giving students free time, let students play games and should be entertaining them.

Keywords: Physical Education And Sport Courses, Physical Education And Sports Teacher

### OP. 593 TURKISH IN-SERVICE PHYSICAL EDUCATION TEACHERS' PERCEPTIONS OF MEASUREMENT AND EVALUATION

Nurdan Yaykın<sup>1</sup>, Cevdet Cengiz <sup>1</sup>

### Abstract

**Objective:** The purpose of the study is to examine the in-service physical education teachers' perceptions on general competency, physical education lesson general competence related to measurement and evaluation and alternative assessment, and to investigate with different variables. Specifically, the aim of this study were twofold: first (a) to investigate the perceptions on general, physical education lesson general and alternative assessment competency in accordance with sex, age, education level and school type; and second (b) examine the relation among perceptions on general, physical education lesson general and alternative measurement and evaluation competency in accordance with the year of in-service?

**Method:** Participants were 221 female, 493 male (n=714) voluntarily physical education teachers from 15 different cities, determined randomly from seven regions of Turkey. For data collection "General Competency Scale for In-Service Physical Education Teachers" (Nartgün, 2008), "Physical Education Class Measurement and Evaluation Competency Perception Scale " (Şirin, Çağlayan and Ince, 2009) and "Perception Scale for Pre-Service Physical Education Teachers' Alternative Measurement and Evaluation", developed by Arslan (2011) and personal information forms were gathered. Descriptive statistics, Multivariate Analysis of Variance (MANOVA) and non-parametric Pearson Chi-square analysis were used for data analyses.

**Results:** According to the descriptive statistics (mean and standard deviation) results of in-service physical education teachers were; general competency ( $3.73 \pm .66$ ), physical education class competency ( $=4.00 \pm .63$ ), alternative assessment perception ( $=5.29 \pm .76$ ). For the first question MANOVA results indicated that, there is statistically significant differences on age (Pillai's trace=0.29, F(111,1)=1.39, p<0.05,  $\eta$ 2=0.09) and school type (Pillai's trace=0.03, F(6,954)=2.61, p<0.05,  $\eta$ 2=0.01) for the levels of measurement and evaluation general competency (MEGC), physical

<sup>&</sup>lt;sup>1</sup> Çanakkale Onsekiz Mart University School of Physical Education and Sports

education class competency (PECC) and alternative assessment perception (AAP). However, there is no significant difference between the sex (Pillai's trace=0.00, F (3,476)=0.63, p>0.05,  $\eta 2$  = 0.00) and education level (Pillai's trace=0.01, F (6,954)=1.41, p>0.05,  $\eta 2$  = 0.00) with MEGC, PECC and AAP (p>0.05). As a result of the further analysis (One-Way Analysis of Variance, ANOVA), whereas MEGC perception showed no meaningful differences in age variable, in the perception of PECC [F (37,478)=1.64, p<0.017] and AAP [F (37,478)=1.72, p<0.017] there were significant differences. In addition, there are significant differences between MECC [F (2,478)=5.23, p<0.017] and PECC perception [F (2,478)=4.40, p<0.017] for the school type variable. Pearson Chi-Square test was applied for the second question of the study. There are statistically significant differences between the year of service and the levels MEGC  $\chi^2$ (n=714)=325,54, PECC  $\chi^2$ (n=714)=481,71 and AAP (n=714)=541,98 (p<0.05).

**Conclusion:** In the light of the findings, it is determined that in-service physical education teachers find themselves sufficient for physical education assessment, and there are differences among the MEGC, PECC, and AAP levels as their age and school type changed. The levels of MEGC, PECC, AAP of the physical education teachers have changed depending on their year of in-service.

Keywords: In-Service Physical Education Teacher, Measurement And Evaluation, General Competency, Alternative Assessment

## OP. 615 PERCEPTIONS FOR PROFESSIONAL COMPETENCE OF THE PHYSICAL EDUCATION TEACHERS

Faruk Akçınar<sup>1</sup>, Mehmet Güllü<sup>1</sup>, Cenk Temel<sup>1</sup>

### **Abstract**

**Objective:** The aim of this study is to examine the perceptions for professional competence of the physical education teachers.

**Method:** Descriptive method has been used in the research. The research group consists of 102 female and 239 male, in total 341 physical education teachers. As data collection tool, "Scale of Teacher Candidate's Perception for Competence Concerning Himself' developed by Çakır, Erkuş and Kılıç (2004) has been used in the research. The scale developed as one-dimensional includes 34 items and in the style of 5 point Likert Scale. Options have been graded between 0-4, the lowest grade taken is "0" and the highest grade is "120". Cronbach Alfa internal consistency coefficient of the Scale is 80'dir. As research data do not show normal distribution, Man-Whitney U test and Kruskal Wallis Test from nonparametric tests have been used. Significance level has been chosen as  $\alpha$ =0,05.

**Results:** Professional competence grade of the physical education teachers has been found as X=98,35. There is no significance difference (p>0,05) found between professional competence grades according to genders (p=0,116), marital status (p=0,802), service period (p=0,217), school types they work (p=0,116) of the physical education teachers. However, there is a significance difference found (p<0,05) according to the ages (p=0,008) and education levels (p=0,007) among professional competence grades.

**Conclusion:** The perceptions of the physical education teachers for professional competence have been found high. However, their perceptions change according to their education levels and ages. It has been observed that the physical teachers aged 51 and over and educated post graduate have higher perceptions for professional competence. As a conclusion, it can be reported that increase in the knowledge, experience and practice related to their profession is the important factor to make their perceptions for professional competence high.

**Keywords: Physical Education Teacher, Professional Competence** 

<sup>&</sup>lt;sup>1</sup> İnönü University School of Physical Education and Sports

### OP. 620 DEVELOPING AN ATTITUDE SCALE IN PHYSICAL EDUCATION LESSON FOR SCHOOL ADMINISTRATORS

<u>Varol Tutal</u><sup>1</sup>, Ebubekir Aksay <sup>2</sup>, Mehmet Efe <sup>3</sup>

#### **Abstract**

**Objective:** The aim of this research is to develop an eligible and credible attitude scale suitable for identifying the attitudes of school administrators towards Physical Education lesson.

**Method:** It has been asked of twenty school administrators to write a composition about Physical Education and as a result, a scale draft has been prepared. The scale draft was applied to 360 school administrators and the data of 351 school administrators who were found valid was loaded into the software.

Results: The Kaiser-Mayer-Olkin (KMO) value which is used for checking the relevancy to the explanatory factor analysis of the data acquired is 0,865 and the Barlett Test (x2=4514,787 df= 703) gave the meaning (P<0.01). The principal component analysis was used for the factor analysis and for turning operation; vertical turning technique was used. The scale was decided to be single. In second factor analysis, KMO was 0,903 and barlett test meant (x2=2973,939 df=190 p<0,01). In this study, an item analysis was made to see the scale's construct validity better. For the reliability of the scale, the internal coefficient of consistence (Coranbach Alpha) was found 0.902. As a result of EFA, the remaining 20 items were loaded to Lisrel 8.8 Packaged software for confirmatory factor analysis (CFA). First, Path analysis was made. It was observed that inconsistencies occured in first CFA model consistency criteria. Therefore, second correction indexes were checked and 7 questions decreasing the consistency value of the model were removed out of the scale. And as a result of CFA, those values were found; x2=189,48, df:65, p=0,000 and REMSE=0,074, and also 173 people was found to be critical. The results of last CFA proved that the results were acceptable.

**Conclusion:** As a result, the construct validity point of the scale is 0,86, the variance it accounts for is %34 and Cronbach Alpha factor is 0,85. "The Attitude Scale of Physical Education Lesson for School Administrators (ASPELSA)", which involves 13 questions (12 positive and one negative) was created.

Keywords: Physical Education Lesson, School Administrators, Attitude

### OP. 629 DEVELOPING A BADMINTON CONTENT KNOWLEDGE TEST AND PRELIMINARY FINDINGS ON PETE STUDENTS

Erhan Devrilmez<sup>1</sup>, Mustafa Levent İnce <sup>1</sup>

#### **Abstract**

**Objective:** The purpose of this study was to develop a badminton content knowledge test and examine related content knowledge level of physical education teacher education (PETE) students by using the content knowledge framework of Ward.

**Method:** Initially, intended learning outcomes for a badminton course including common and specialized content knowledge dimensions were identified by using the related literature and expert opinions in the field. Then, a test item pool was prepared for each intended learning outcome; 1) common content knowledge part including knowledge of rules, etiquette and safety, and knowledge of technic and tactic, 2) specialized content knowledge part including knowledge of student errors and knowledge of instructional task and representation. Then, questions are checked in terms of clarity and

<sup>&</sup>lt;sup>1</sup> Provincial Directorate of National Education Malatya

<sup>&</sup>lt;sup>2</sup> German Sport University Cologne Deutsche Sporthochschule Sport

<sup>&</sup>lt;sup>3</sup> Siirt University School of Physical Education and Sports

<sup>&</sup>lt;sup>1</sup> Middle East Technical University Faculty of Education/ Department of Physical Education and Sports

understandability by using cognitive interview with badminton experts and PETE students. Final test included 133 multiple choice questions in the common content knowledge part and 9 open ended items including sub-questions in the specialized content knowledge part. Maximum possible scores were 133 for the common content (48 for knowledge of rules, etiquette and safety, 85 for technic and tactics), and specialized content parts (20 for students errors, 14 for instructional task and representation). After that, the test was applied to 82 pre-service teachers who had just completed a badminton course at PETE programs. Item discrimination index and item difficulty index of multiple choice questions in test were analyzed by the Test Analyze Program of Ohio State University (version 12.9.3).

**Results:** Item discrimination index of rules, etiquette and safety in multiple choice part of test was .27 and item discrimination index of technic and tactics was .34. Moreover, item difficulty index of rules, etiquette and safety in multiple choice part of test was .68 and item difficulty index of technic and tactics was .42. Findings indicated that item difficulty index of multiple choice questions were sufficient. In open ended questions, inter-evaluators and intra-evaluator agreements were examined. Agreements of three evaluators were 83.4% and agreements of intra-evaluator were 87.2%. Interevaluators and intra-evaluator agreement level were satisfactory. Finally, average score of PETE students on subscales of badminton content knowledge test was analyzed. According to findings, average score of PETE students at rules, etiquette and safety part of test was  $32.8 \pm 5.6$ . Average score of technic and tactics part was  $35.6 \pm 12.6$ . On the other hand, average score of student errors which was the first part of specialized content knowledge was  $6.5 \pm 3.6$ . Average score of instructional task and representations part was  $2.0 \pm 2.5$ . Overall, average score of specialized content knowledge was  $8.5 \pm 5.4$ .

**Conclusion:** In conclusion, item difficuty index and item discrimination index of the badminton content knowledge test are satisfactory for evaluating intended qualities of PETE students. For openended questions, inter-evaluators and intra-evaluator agreements are satisfactory. Preliminary findings indicate that badminton content knowledge level of PETE students is insufficient. In order to improve intended qualities of physical education teachers, badminton courses should be re-designed to improve all aspects of content knowledge of PETE students.

Keywords: Physical Education And Sport, Content Knowledge, Badminton

### OP. 667 THE EFFECTS OF PHYSICAL ACTIVITY CARDS ON PHYSICAL ACTIVITY LEVELS OF ELEMENTARY SCHOOL STUDENTS IN PHYSICAL EDUCATION LESSONS

 $\underline{{\rm Salih}}\, {\rm G\"{o}khan}\, {\rm Irez}^1$ , Metin Yaman  $^2$ , G\"{o}n\"{u}l Babayıgıt Irez  $^3$ , Sinan Bölükbaş  $^4$ 

- <sup>1</sup> Ministry of National Education 75Th Anniversary of The School of Arts and Sciences
- <sup>2</sup> Gazi University School of Physical Education and Sports
- <sup>3</sup> Muğla University School of Physical Education and Sports
- <sup>4</sup> Ministry of National Education

#### **Abstract**

**Objective:** The aims of this study were to investigate the effects of usage of 'the physical activity cards' on physical activity levels of first, second and third grades elementary school students in Physical Education Lessons.

**Method:** Total 384 students from 7 elementary schools from Mugla center were observed by SOFIT (System for Observing Fitness Instruction Time) is a direct systematic observation method. Physical Activity Cards which has good quality have been developed for teachers, coaches and other sports educators who are active in sports education for society and for university students in the departments of physical education in living England and Scotland as TOPS cards. Ministry of Education had tried to adapted and developed to these TOPS cards for physical education lesson plans for teachers, physical educators and Coaches as a part of International İlham Project. SOFIT is reliable tool measuring student activity, lesson content, and teacher behavior by using observation method

(McKenzie, 2001). McKenzie, Sallis and Nader (1991) searched the spent time consumed as physical fitness in PE lessons by Using SOFIT protocol. With this method both lesson content and teacher behavior was observed at the same time. Five activity levels that are Lying, sitting, standing, walking and running were observed by SOFIT Protocol both experimental and control group's pre and post tests. Distributions of collected data were given as Percent (%), and frequency (f). Differences of observations were tested with paired t test.

**Results:** It was found that physical activity card has no effect to make ''active'' students in a physical education lesson. Although there was an increase in 'standing'' levels, there were decrease in 'walking' and 'running'' levels of students during a lesson. Moreover, there was decline in moderate to vigorous (MVPA) physical activity levels. There was a decline post-observation MVPA level of both experiment and control groups while the MVPA levels of pre observation were almost 50%. This decline is more prominent in experiment group students.

**Conclusion:** As a result, the physical activity cards were not useful to be maintaining active of students in PE lessons. There was no increase "walking" and "running" levels although the increase in "standing" levels of students. This may reason of spending time to wait for turn of students while in the activity was occurring. While it was observed that students like to use of physical activity cards in their lesson, there was no increase in their physical activity levels. Because of the teachers not useful separating groups and small number of sports equipments may be reason of these results.

Keywords: Physical Activity Cards, Physical Education, Physical Activity

## OP. 686 COMPARISON OF SOME BLOOD PARAMETERS OF CHILDREN WITH CEREBRAL PALSY TAKING TREADMILL EXERCISE

Nazmi Sarıtaş<sup>1</sup>, Hanife Abakay<sup>2</sup>, Betül Coşkun<sup>3</sup>, Mustafa Karakuş<sup>1</sup>

- <sup>1</sup> Erciyes University School of Physical Education and Sports
- <sup>2</sup> Melikgazi Special Education and Rehabilitation Centre Graduate Student
- <sup>3</sup> Middle East Technical University School of Physical Education and Sports

### **Abstract**

**Objective:** The postponement of the brain development as a result of brain lesion causes some functional inabilities affecting the whole body of the children with cerebral palsy compared to their peers. The benefits of aerobic exercises for adolescent and children are stated in many studies. Therefore, in this study, it was aimed to investigate the effects of the treadmill exercise on some blood parameters in disabled children diagnosed with cerebral palsy.

**Method:** The subjects of the study are 37 children with cerebral palsy, whose ages ranging from 7 to 15 years, taking regular physical therapy in a private education and rehabilitation center. The experimental group and the control group consists of 20 children (8 girls and 12 boys) and 17 children (10 girls and 7 boys), respectively. The subjects of the experimental group were made to have treadmill exercise under the custody of a physical therapist twice a week for three months (totally 24 walking exercises) while their treatments in the center were continuing. At the beginning and end of the study, pre and post-exercise values of glucose, blood urea nitrogen, alkaline phosphatase, total CK, LDH, GGT, sodium, potassium, chlor, uric acid, calcium, phosphor of the children in experimental and control groups were compared in the laboratory of a training and research hospital. As for the classification of motor development, Gross Motor Classification System Awere used.

**Results:** While a significant difference was found in AST, LDH, sodiumA and chlor pre-exercise values in intergroup comparisons, as for the post-exercise intergroup comparisons there was a significant difference in creatinin value. No significant difference was found in other blood parameters and Gross Motor Function in the pre and post-exercise intergroup comparisons.

**Conclusion:** It was concluded that treadmill exercise led to moderate alteration in freedom of movement of the children although it was not statistically significant. It is thought that new tests with longer exercises will shed light for future studies.

Keywords: Cerebral Palsy, Treadmill Exercise, Gmcs, Blood Parameters

### OP. 699 EFFECT OF BALANCE OF 3 MONTHS TRAINING PROGRAM IN CHILDREN WITH DOWN SYNDROME

Asiye Filiz Çamlıgüney<sup>1</sup>, Yaşar Tatar <sup>2</sup>, Selda Uzun <sup>1</sup>, Nusret Ramazanoğlu <sup>1</sup>, Sevinç Karabürk <sup>1</sup>, Verda Akyüz <sup>1</sup>

### **Abstract**

**Objective:** The aim of the study was to investigate the effect of 3 month training program on balance in adolescents with DS.

Method: Seven children with DS between 8 and 13 years of age were included in this study. Subjects with DS participated in 45 minutes training program which involve in balance, strength, coordination and motor ability, 2 days per week during 12 weeks (3 months). Anthropometric measurements before and after training were as follows: pre-training (mean height 123.14±12.01 cm; weight 31.56±10.98 kg; BMI 20.76±7.08 kg/m<sup>2</sup>) and post-training test (mean height 129.29±14.35 cm; body weight 31.99±10.98 kg: BMI 18.81±3.33 kg/m<sup>2</sup>). Static balance parameters (double leg) were measured a Matscan force platform (Tekscan, Boston, MA) with eyes open (EO) and closed (EC) pre-and post training period. In the static balance test, displacement of Center of Pressure (COP area, cm<sup>2</sup>), anterior-posterior (A-P, cm) and medio-lateral (M-L, cm) excursions were recorded for 30 s. Tests were repeated for three times with 1 minute rest and best score was chosen for evaluation. During the balance measurements, the subject stood barefoot and arms at sides. The children were placed to stand position in the mat with keeping a distance between the feet similar to the distance between the shoulders in order to enable the foot position to be repeated from the trials. In order to minimize head movement and prevent vestibular disruption for EO condition, participants were instructed to focus on the center of a visual target. The visual target, rectangular 2 cm green spot, was positioned at a distance of a 2-meter at the height of the eye level of each child. Due to the difficulties subjects with down syndrome in keeping their eyes closed (EC), and keeping stand still up 30 s during balance test period (EO, EC). They used ear protector for environmental effects. Black eye patch was used for EC balance tests. Balance tests were performed training instructor because of familiarization of intellectual disabilities with DS adolescent. In order to assess the static balance ability of the participant, percentage value was calculated between pre-and post training periods for statistical

**Results:** In this study, in EO condition, the biggest increase in stability was found in M-L balance with 36.6% increment (pre-test: 3,06 cm<sup>2</sup>; post-test: 2,24 cm<sup>2</sup>). For EC-condition, the largest increase was displayed in COP area with 20% (pre-test: 3,10 cm<sup>2</sup>; post-test: 2,57 cm<sup>2</sup>). Changes of other parameters (EO-COP cm<sup>2</sup>, EO (A-P, cm); EC (A-P, cm), EC (M-L, cm)) were minimal or less than eight percent.

Conclusions: In children with DS, physical activity and sports programs at early stages are a necessity for postural control. Specific postural training could be contributing to motor performance in people with DS. As in our study, people with DS showed poor control, especially in A-P balance. Therefore, they should be encouraged to participate in specific exercise programs and strengthen their ankle muscles. In our study, 3 months general exercise program only increased some balance parameters. This condition could be caused by slower normal development and less increase of muscle strength that helps postural control, in these children. Due to this reason effects of long term exercise programs on balance control should be examined in children with DS.

Keywords: Down Syndrome, Balance, Training, Children

<sup>&</sup>lt;sup>1</sup> Marmara University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Marmara University Faculty of Medicine Department of Physical Medicine and Rehabilitation

### OP. 706 EFFECTS OF EVERYONE CAN PROGRAMME ON MOTOR SKILLS AND SOCIAL CONNECTIONS OF MENTALLY DISABLED STUDENTS

Yeşim Gökgöz<sup>1</sup>, Mehmet Ata Öztürk <sup>2</sup>

#### **Abstract**

**Objective:** The purpose of this study is determining the effects of 'Everyone CAN' program on the gross motor development and on the social engagement of children with intellectual disabilities.

**Method**: Single case research design is used where research group also serves as control group using a multiple baseline in AB design. 'Test of Gross Motor Development II' is used to measure motor development in a pre-test post-test design. Participants were 14 students (6 female, 4 male), who attend a public special education school in İstanbul Province, ages ranging from 8 through 11. Social engagements were measured using 'Engagement Check', where coders observer video recordings in 15 second intervals. The classes were 4 class hours per week and data collection took 6 weeks.

Results: According to the TGMD-2 scores, participants showed 83% motor improvement. Engagement with adults/peers increased from an average of 12.3 to 24.3 in 1st grades; and from 13.12 to 20.13 in 4-5th grades. Engagement with educational materials (proficiency level) increased from an average of 1.61 to 3.47 in 1st grades and from 0.92 to 3.42 in 4-5th grades. In order to evaluate the social engagement improvement levels with standardized scores, three effect size analysis were conducted. Percentage of non-overlapping data (PAD) were 70.33 and considered as 'effective practice'. According to the percentage of data points exceeding the median (PEM), 13 students showed improvement in social engagement with adults/peers 91.22. Percentage of all non-overlapping data is calculated as 80.89.

**Conclusion**: According to these anlaysis, 13 of te 14 participants showed significant and meaningful social improvements.

Keywords: Mental Disabled, Physical Education, Sport

<sup>&</sup>lt;sup>1</sup> Hayriye Kemal Kusun Special Education Application Center

<sup>&</sup>lt;sup>2</sup> Middle East Technical University Department of Physical Education and Sports

# OP. 62 EVALUATION OF PERCEIVED FREEDOM IN LEISURE AND LIFE SATISFACTION OF INDIVIDUALS ATTENDING FITNESS CENTER OVER DIFFERENT VARIABLES

Beyza Merve Akgül<sup>1</sup>, Merve Karaman<sup>1</sup>, Tebessüm Ayyıldız<sup>1</sup>, Şenol Göral<sup>1</sup>, Aytekin Hamdi Başkan

<sup>1</sup>, Mehmet Bayansalduz <sup>1</sup>, Ezgi Ertüzün<sup>2</sup>

#### **Abstract**

### **Purpose**

Perceived freedom in leisure reflects skills in individuals' attending leisure activities and therefore it is influenced by the events taking place in their life. People who believe they have more freedom in leisure experiences have tendency of expressing more competency, focus of control, internal motivation and acting emotions (Janke et al., 2010). In this study, it was aimed to determine behavior of individuals attending private sports center about leisure and analyze freedom perceived in leisure according to specific demographic variables (gender, age, income) and the relation between freedom perception and life satisfaction.

### Method

204 participants, 114 males and 90 females, attended voluntarily. Freedom of participants perceived in leisure was determined by "Perceived Freedom in Leisure Inventory" which was developed by Witt and Ellis (1985) and adapted into Turkish by Yerlisu and Ağyar (2011); "Personal Information Form" was used in order to determine personal information and leisure activities of participants. "Life Satisfaction Inventory" which was developed by Diener et al. (1985) and adapted into Turkish by Köker (1991) was used in order to determine life satisfaction of participants.

Freedom score relations were analyzed according to life satisfaction inventory and various demographic variables (age, gender, income etc.). Pearson and Spearman Correlation analysis was used in order to explain the relation between life satisfaction and perception of freedom; significance test for the difference between two means and one-way analysis of variance were used in order to explain who perception of freedom varies according to various demographic variables.

### **Findings**

According to the results of significance test for the difference between two means which was carried out in order to test participants' sense of freedom perceived in leisure; there was no statistically significant difference between scores of female and male participants (t: 0,5606; p>0.05). According to the results of one-way analysis of variance which was carried out in order to test sense of freedom perceived in leisure according to age and income; there was no statistically significant difference between scores of participants according to age (F:1.317; p>0.05), (F:2,263; p>0.05). according to the results of Pearson and Spearman Correlation analysis which was carried out in order to explain the relation between life satisfaction and perception of freedom; it was determined that there is weak positive correlation between life satisfaction and score of freedom perception (r=0,3878; p<0.0001).

#### Result

It was concluded that there is no significant difference in total score of perceived freedom in leisure of individuals attending private sports center according to variables of gender, age and income variables. In addition to this, there was weak positive correlation between life satisfaction and score of freedom perception.

Keywords: Leisure, Perceived Freedom, Life Satisfaction

<sup>&</sup>lt;sup>1</sup> Gazi University, School of Physical Education and Sport

<sup>&</sup>lt;sup>2</sup> Selcuk University, School of Physical Education and Sport

# OP. 115 USE OF TRANS-CONTEXTUAL MODEL-BASED INTERVENTION IN DEVELOPING LEISURE-TIME PHYSICAL ACTIVITY BEHAVIOR OF UNIVERSITY STUDENTS

Mine Müftüler<sup>1</sup>, Mustafa Levent İnce <sup>2</sup>

#### **Abstract**

### **PURPOSE**

Studies conducted with Turkish university students demonstrated that they have physically inactive lifestyle. It is suggested to examine the individuals' motivation and determinants of physical activity (PA) behavior.

Trans-Contextual Model (TCM) is based on the premise that motivation in one context, such as PA course can be transferred into another but related context, such as leisure-time PA (LTPA) setting. The purpose of this study was to examine the effect of TCM-based PA course on university students' perceived autonomy support, autonomous motivation, determinants of LTPA behavior, need satisfaction in exercise setting and LTPA behaviors and to describe the participants' experiences in TCM-based PA course.

#### **METHOD**

A total of 70 university students, who were randomly assigned to experimental (n = 35) and control (n = 35) groups, were voluntarily participated in this study. Those in the experimental group participated in 12-week TCM-based PA course. The participants were administered a series of questionnaires in pretest and posttest.

In order to examine the constructs of TCM "Perceived Autonomy Support in Exercise Setting", "Perceived Locus of Causality", "Behavioral Regulations in Exercise Setting-2", "Basic Psychological Need Satisfaction in Exercise Setting", "Determinants of LTPA Behavior" questionnaires and to examine LTPA behavior "International Physical Activity Questionnaire-Short Form" and "Physical Activity Stages of Change Questionnaire" were used. After following 12-week TCM-based PA course, individual interviews with 13 volunteer students from experimental group were conducted.

In the TCM-based PA course, autonomy supportive strategies were used. These were (1) providing explanatory rationales, (2) nurturing inner motivational resources, (3) using informational, non-controlling language, (4) offering choices, and (5) acknowledging students' negative feelings.

Quantitative data were analyzed with descriptive and inferential statistical analyses. Individual interviews were analyzed via 4-stage systematic qualitative analysis.

#### RESULTS

According to the descriptive analysis, posttest scores of the experimental group were found to be higher than pretest scores. Besides, posttest scores of experimental group were higher than those of control group.

Paired samples *t*-test results indicated that there was a significant increase in the posttest scores of perceived autonomy support from instructor ( $t_{(34)} = 6.54$ , p < .05) and from peers ( $t_{(34)} = 3.75$ , p < .05). Repeated measures ANOVA showed a significant increase in the posttest scores of identification ( $F_{(1,34)} = 8.85$ , p < .05) and intrinsic motivation ( $F_{(1,34)} = 8.33$ , p < .05) in PA course setting.

According to the mixed design MANOVA results, TCM-based PA course significantly affected introjected regulation ( $F_{(1, 68)} = 9.80$ , p < .01), identified regulation ( $F_{(1, 68)} = 18.33$ , p < .01), and intrinsic regulation ( $F_{(1, 68)} = 15.15$ , p < .01) in LTPA setting; intentions ( $F_{(1, 68)} = 10.35$ , p < .0125) and perceived behavioral control ( $F_{(1, 68)} = 6.61$ , p < .0125) toward LTPA behavior; and autonomy ( $F_{(1, 68)} = 11.31$ , p < .017) and relatedness ( $F_{(1, 68)} = 7.37$ , p < .017) need satisfaction. Descriptive statistics stated significant increase in the posttest scores of experimental group with regard to those subscales.

Chi-square test showed a significant difference in the experimental group's posttest scores of PA level

<sup>&</sup>lt;sup>1</sup> Mugla Sıtkı Koçman University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Middle East Technical University Department of Physical Education and Sports

 $(c^2_{(2)} = 7.46, p < .05)$ . With regard to PA stages results, the analyses found significant differences in the posttest scores of either experimental group  $(c^2_{(9)} = 19.43, p < .05)$  and control group  $(c^2_{(16)} = 27.68, p < .05)$ .

Finally, the findings emerged from the systematic qualitative analyses pointed out four general themes; (1) regular PA participation, (2) the need for knowledge, (3) learning climate, and (4) becoming autonomous toward PA participation.

#### **CONCLUSION**

Based on the findings, it could be argued that TCM-based PA course have a significant affect on university students' LTPA behavior. The results showed significant differences in TCM constructs. The experimental group students who were participated in TCM-based PA course showed significant differences in LTPA behavior. Besides, the emergent themes from individual interviews showed that TCM-based PA course supported LTPA behavior development among these university students. In conclusion, it is recommended that PA classes for university students should be designed according to the Trans-Contextual Model.

Keywords: Trans-Contextual Model, Leisure Time Physical Activity, University Students

## OP. 117 THE IMPACT OF PSYCHOLOGICAL WELL-BEING ON LEISURE NEGOTIATION OF UNIVERSITY STUDENTS

### Tennur Yerlisu Lapa<sup>1</sup>

#### **Abstract**

The purpose of the study is to investigate the impact of psychological well-being on leisure negotiation of university students. This study was conducted in the relational screening model. The study population consisted of 250 female (M=20.29; SD=1.92) and 250 male (M=21.27; SD=1.62) totalling 500 university students (M=20.78; SD=1.84) from Akdeniz University with the ages ranging between 18 and 34.

For testing the psychological well-being of participants "The Scales of Psychological Well-being (SPWB)" which was developed by Ryff (2008) and adapted to Turkish culture by Akın, 2008) was utilised. The scale consisted of 84 items and six sub-dimensions. This sub-dimensions were; autonomy, environmental mastery, personal growth, positive relationships with others, purpose in life and self-acceptance. The resulting reliability coefficients ranged between 0.86-0.93 and for the present study, while internal consistency of the general of the scale was .93; internal consistency coefficients for the sub-dimensions of the scale were found to be .64, .68, .64, .82, .72 and .70 respectively.

For testing the leisure negotiation strategies of participants "Leisure Negotiation Strategies Scale (LNSS)" which was developed as a scale by Hubbard and Mannell (2001), modified to recreational campus sports by Elkins (2004) and whose validation has been verified by Beggs et al. (2005) was utilised. This scale is adapted into Turkish for university students by Yerlisu Lapa (2012). The scale consisted of 31 items and related to six basic negotiation strategies: time-management strategies, skill-acquisition strategies, interpersonal relations, intrapersonal validation strategies, physical fitness strategies and financial management. The resulting reliability coefficients ranged between 0.85-0.91 and for the present study, while internal consistency of the general of the scale was .76; internal consistency coefficients for the factors of the scale were found to be .64, .68, .64, .82, .72 and .70 respectively.

The Pearson correlation techniques and simple regression analysis were employed for the statistical analysis of the study.

As results of the analysis; there is a statistically significant positive linear relationship between total psychological well-being score and the sub-dimensions (excluding autonomy sub-dimension) and leisure negotiation (p < 0.01).

Regression analysis shows that total psychological well-being score (t = 4.87, p < .001,  $\beta = .21$ );

<sup>&</sup>lt;sup>1</sup> Akdeniz University School of Physical Education and Sports

environmental mastery (t = 5.88, p < .001,  $\beta = .25$ ); personal growth (t = 3.86, p < .001,  $\beta = .17$ ); positive relationships with others (t = 4.02, p < .001,  $\beta = .17$ ); purpose in life (t = 4.20, p < .001,  $\beta = .18$ ) and self-acceptance (t = 4.64, p < .001,  $\beta = .20$ ) sub-dimensions was the predictors of leisure negotiation..

In Conclusion; the literature emphasize that positive perceptions are effective on leisure negotiation (Dupuis and Smale, 1995; Lindwall and Lindgren, 2005; Sack and Cable, 2005). The one of the positive perception is psychological well-being was introduced by Ma et al. (2012) and in their study the individuals' psychological well-being was the predictors of leisure negotiation. In this respect, our results are in line with the literature.

The most important of this study's limitation is that the data was collected from only one university and sample was not sufficient enough. In future studies, can be looked into correlation between psychological well-being, leisure negotiation and leisure time exercise and can be advised to test with testing structural model.

Keywords: Psychological Well-Being, Leisure Negotiation, University Students

### OP. 168 THE ANALYSIS OF PHYSICAL EDUCATION AND SPORTS TEACHERS' RECREATION HABITS (ISTANBUL-SARIYER EXAMPLE)

 $\underline{\mathsf{Adem}\;\mathsf{Pala}}^1$ , Miraç Yılmaz  $^1$  , Mehmet Kargün  $^1$ 

### **Abstract**

### Purpose;

The purpose of this study is to analyse the recreation habits of physical education and sports teachers. The physical education and sports teachers in Sarıyer, İstanbul constitute the study group of the work. 22 female and 31 male in total 53 teachers have taken part in the research voluntarily.

### Method;

The data in the research intended to evaluate and analyse the recreation habits of physical education and sports teachers working in Sariyer district of İstanbul Province were collected by means of 2 scales. Personal Information Form and Recreation Activities Determination Form questionnaires were applied. In the analysis of the data were analyzed in terms of the questionnaires, percentage and frequency distributions were extracted; Chi-Square test and cross tabulation were used. In statistical analysis, data were analyzed with the help of SPSS 20.0 and the significance rate was determined 0,05.

#### Findings;

Determine to preferences which "when i have free time i watch T.V" for this prefence of physical education teacher, corsstab and ki-square tests was applied  $\alpha$ =0.05. Test results show that there are differences between male and female choices (p<0.05). Female teachers 35.9 % "i agree", male teachers 37.1 % "i agree", they said.

Determine to physical education teachers' attendance preference in their free time physical education teachers choose i prefer "Open Air", corsstab and ki-square tests was applied  $\alpha$ =0.05. Test results show that there are differences between ages (p<0.05). 33-40 age teachers 26.3 % "maybe i agree", 25-32 age teacher 64.7 % " i agree", they said.

### **Conclusion:**

According to the findings of this study, there were statistically significant differences between the recreation preferences, ages and genders of physical education and sports teachers (p < 0.05). Thinking about this study, which will be based on to similar research in the future and to making other municipalty and different province of this study which is very important for integrity.

Keywords: Physical Education and Sports Teacher, Leisure Time

<sup>&</sup>lt;sup>1</sup> Marmara University School of Physical Education and Sports

### OP. 225 THE PERCEPTION OF PARENTS WHOSE CHILDREN AGED 3-6 STAYING IN UNIVERSITY OR STATE HOSPITALS OF HOSPITAL PLAY ROOMS

 $\underline{\text{Suleyman Can}}^1$ , Erdil Durukan  $^2$ , Nurdan Ipek  $^3$ , Rukiye Cetin  $^4$ 

- <sup>1</sup> Mugla Sıtkı Koçman University Faculty of Education
- <sup>2</sup> Balıkesir University School of Physical Education and Sports
- <sup>3</sup> Ministry of National Education
- <sup>4</sup> Ministry of National Education

### **Abstract**

In its broadest definition, play can be defined as an activity whose rules are determined by the players or predetermined, requiring mental skills and/or physical strength and done by individuals from every age to have a good time or for entertainment. When the definition is made considering children, it can be defined as the most effective learning process that is a part of real life participated by children voluntarily and with enjoyment and that lays the ground of physical, cognitive, linguistic, affective and social development (Aral, Gürsoy and Köksal, 2001). Play seems to be an element contributing to both physical and cognitive development of children. Through play, children explore their environment, learn social roles and have both affective and psycho-motor gains. Therefore, in environment like hospital that is not suitable for the cognitive, affective and motor development of children, play and the use of its main tools, toys are of great importance. According to a great amount of research, sick children have greater need for play than healthy children.

In this line, the problem statement of the current study can be put as "What are the perceptions of parents whose children aged 3-6 staying in university or state hospitals of hospital play rooms?"

### **Purpose:**

The role of play and play rooms in reducing the negative effects of hospital on children is well known. Therefore, the current study aims to determine the perceptions of parents whose children aged 3-6 staying in hospitals for hospital play rooms.

### **Method:**

The universe of the study employing descriptive research method consists of the parents of all the children aged 3-6 staying in university and state hospitals. In the determination of the sampling, cluster sampling method was used. Cities were randomly selected from these clusters. The sampling of the study consists of 110 parents of sick children. The distribution of the sampling according to regions and hospitals are as follows:

- In Central Anatolian Region, 19 parents of sick children staying in the Hospital of Faculty of Medicine of Gazi University (Ankara),
- In East Anatolian Region, 6 parents of sick children staying in the Hospital of Turgut Özal Medical Center of İnönü University,
- In Southeast Anatolian Region, 8 parents of sick children staying in Gaziantep Children's Hospital.
- In Marmara Region, 17 parents of sick children staying in İstanbul University Cerrahpaşa Faculty of Medicine Hospital,
- In Aegean Region, 17 parents of sick children staying in Zübeyde Hanım Children's and Maternity Hospital (Afyon) and 9 parents of sick children staying in Muğla Fethiye State Hospital.
- In Black Sea Region, 9 parents of sick children staying in Farabi Hospital of Faculty of Medicine of Karadaniz Technical University (Trabzon),
- In Mediterranean Region, 11 parents of sick children staying in Süleyman Demirel University Research Hospital (Isparta) 11 and 14 parents of sick children staying in Antakya State Hospital (Hatay).

In the study, as data collection instruments, a 15-item personal information form and a 19-item questionnaire developed through literature review and by taking expert opinions were used. The data collected were entered into SPSS 14 program package and analyses were conducted in line with the purpose of the study.

#### **Findings:**

The hospital staying period of 61.8% of the participants' children ranges from 1 week to 4 weeks and 63.6% of the children have acute (short-time) illness and 36.4% of them have chronic (long-time) illness. The percentage of the parents saying yes to the questionnaire item "Should there be a play room in the hospital?" is 99.1. The percentage of the parents saying yes to the questionnaire item "Can the toys support cognitive-linguistic development of children?" is 66.4 and the percentage of the parents saying yes to the questionnaire item "Can the toys support physical-bodily development of children?" is 71.8 and the percentage of the parents saying yes to the questionnaire item "Can the toys support the social development of children?" is 80.9.

The percentage of the parents saying yes to the questionnaire item "Can it be argued that the children in the recovery period give better responses to treatment with play rooms and toys?" is 90.0 and the percentage of parents saying yes to the questionnaire item "Do you think that your child's spending time in play room contributes to reducing his/her anxiety and fears" is 88.2.

#### **Results:**

At the end of the study it was concluded that majority of the mothers of the children are housewives and hence, they spend more time with their children at the hospital. The parents think that whether chronically or acutely ill, every child needs play and hence play rooms are very important, the toys in the hospital play rooms are inadequate, the hygiene and cleaning at play rooms need to be improved, plays suitable for the environmental conditions of the hospital should be practiced, children playing recover sooner and give better responses to treatment, play is very useful for children and playing does not make children tired or exhausted rather speeds up their recovery.

Keywords: Play, Hospital, Play Room, Sick Child, Parent

# OP. 253 THE EFFECTS OF RECREATIVE CYCLING MOTIVATION TO SUBJECTIVE VITALITY

 $\underline{\text{Caner Cetinkaya}}^1$ , Ipek Aydın $^2$ , Ozkan Tutuncu $^2$ 

- <sup>1</sup> Dokuz Eylül University Institute of Health Sciences
- <sup>2</sup> Dokuz Eylül University School of Sport Sciences and Technology

#### **Abstract**

Aim: Recently, cycling as a recreational activity is an increasing trend in our country. The efforts of the local governments to build necessary infrastructure, provides an opportunity for cycling. However, not only providing infrastructure, but also social, cultural, economic and environmental factors are related to perform these activities. Cycling is an activity which provides physical activity while having fun. It can have positive effects physically, spiritually, mentally and socially to the individuals. Being spirited and energetic, having hopes for life and being in a good mood may be related to someone's activities throughout life. Based on this information, determining the motivational factors to cycling as a recreational activity and the effects of these factors to subjective vitality are the objectives of the study.

**Method:** The population of the study is individuals in Turkey who are cycling as a recreational activity. In 81 cities, via social media, participants were asked to complete the questionnaire. 641 individual participated to the study. In the field of the study, structured questionnaires were used. Questionnaire consisted of two parts; Cycling Motivation Scale, subjective vitality and demographic variables.

**Results:** In order to test construct validity, exploratory factor analysis has applied to cycling motivation data set, KMO value found as 0.91 (p<0,05) and the total variance explained found as 0.54. It showed that the cycling motivation has six dimensions; socialization, pleasure of experience, identity formation, accomplishment, physical health and utilitarianism. In order to determine the internal consistency, reliability analyze was performed and the general Cronbach's alpha of data was found to be as 0.88 (p<0,05). Correlation coefficient values were calculated among the dimensions of cycling motivation and positive relationship (p<0,05) was found among them. Finally, according to

regression analyze, pleasure of experience, accomplishment, socialization dimensions have effects  $(R^2=0.29, p<0.001)$  on subjective vitality.

**Conclusion:** Recreative cycling is an activity which is providing socialization, improving physical health and enhancing sense of accomplishment. It can be thought that, such features have positive effect on life. As contemplated, pleasure of experience, accomplishment, socialization dimensions have positive effects on subjective vitality in the study. Because, recreative cycling is an activity that no anxiety and stress; but a little bit competition, it can affect the joy of living positively.

Keywords: Cycling, Motivation, Subjective Vitality

### OP. 255 THE EFFECTS OF SPORT MOTIVATION FACTORS TO SERVICE QUALITY PERCEPTION

<u>Ipek Aydın</u><sup>1</sup>, Ozkan Tutuncu <sup>1</sup>

#### **Abstract**

**Aim:** There are too many reasons why participate in sports. Factors such as improving health, socialization, learning efforts are examples to motivate sports. Besides, gym and its service quality are also very important. Gym quality can be evaluated by service quality dimensions as tangibles, reliability, responsiveness, assurance and empathy. However, they should not be considered as SERVQUAL. According to gym's features, perceptions may differ from person to person. According to this, it can be thought that, sport motivation and perceived service quality can be related with each other. In this respect, the aim of the study the effect of sports motivation to perception service quality. **Method:** The population of the study is individuals in İzmir who are going to gym. Research carried out in gyms with participants who accepted to complete the questionnaire. 784 individual participated to the study. In the field of the study, structured questionnaires were used. Questionnaire consisted of

**Results:** In order to test construct validity, exploratory factor analysis has applied to sport motivation data set and KMO value found as 0,91 (p<0,05). It showed that the sport motivation has seven dimensions; learning, pleasure of experience, identity formation, accomplishment, involvement, status and conflicts. The general Cronbach's alpha of data was found to be as 0,89 (p<0,05). In order to analyze the relationship among the dimensions of sports motivation and service quality, correlation coefficient values were calculated and positive relationship (p<0,05) was found between the dimensions, except conflicts-identity formation and conflicts-status variables. Finally, according to regression analyze pleasure of experience, status, conflicts, learning and accomplishment dimensions have effects on perception of service quality.

two parts; Sport Motivation Scale and service quality item and demographic variables.

**Conclusion:** In the study, it determined that sports motivation has an effect on perceived service quality. Participants considered that pleasure of experience has a primarily effect on perceived service quality. Good experiences have positive impact on service quality perceptions. In addition, conflict dimension has a negative effect on perception of service quality. If somebody has negative ideas related to sports activities, it can be thought as a normal that has negative opinions about service quality.

**Keywords: Sports, Motivation, Service Quality** 

<sup>&</sup>lt;sup>1</sup> Dokuz Eylül University School of Sport Sciences and Technology

### OP. 280 HEALTH BELIEFS OF MEN WITH REGARD TO RECREATION ACTIVITIES SPORTIVE

 $\underline{\text{Ezgi Ertuzun}}^1$ , Beyza Merve Akgul  $^2$ , Said Bodur  $^3$ , Suat Karakucuk  $^2$ 

- <sup>1</sup> Selçuk University School of Physical Education and Sports
- <sup>2</sup> Gazi University School of Physical Education and Sports
- <sup>3</sup> Balıkesir University Faculty of Medicine

#### **Abstract**

This study has been carried out with the purpose of determining men's beliefs in sportive recreation activities in terms of health.

This illustrative study has been conducted on 222 men who gave consent to/volunteered participating in the study in the Konya province center. The Socio-demographic Information Form and Health Belief Scale Related to Sportive Recreational Activities have been used in the compilation of data. The Health Belief Scale Related to Sportive Recreational Activities (HBSRSRA) developed by Ertuzun et. al (2013) is a likert type scale consisting of 5 dimensions and 21 questions and its inner coefficient of consistence for all items is .88. Its Pearson correlation coefficient has been determined to be between .200 and .594. In the analysis of data, with the purpose of determining the distribution of the participants' demographic information, descriptive statistics questioning has been done. The relationship of belief in sportive recreation activities in terms of health with has been evaluated with age, work state, having children, education, income level, number of years spent living in the city, participation in sportive recreation activities and participation types. In order to determined the normal distribution suitability of the variables, firstly the Kolmogorof-Simirnof Test has been applied and according to the category style of the variables' comparison, the Mann-Whitney U and Kruskall Wallis (Chi-Square) tests among the Non-Parametric Tests have been applied.

According to the results of the Mann Whitney U test, which shows the comparison of the male participants' sub-dimension scores of HBSRASRA 'health belief scale related to sportive recreation activities' with the variable of having children, it has been observed that their score averages in relation to the sub-dimension of perceived seriousness (P<0.05) differs in a meaningful level to the advantage of those who have children. According to the results of the Kruskal-Wallis Test, which has been applied on the scores obtained from the sub-dimensions of 'HBSRSRA' Health Belief Scale in Sportive Recreational Activities', when the participants' education states are compared with subdimensions of Perceived Seriousness, Perceived Obstacles, Physical Benefits, Psycho-social Benefits and Self-Efficiency, there is a meaningful difference in the Perceived Seriousness variable in accordance with the education states (0.005) According to the results of the Kruskal-Wallis Test, which has been applied on the scores obtained from the sub-dimensions of 'HBSRSRA' Health Belief Scale in Sportive Recreational Activities', when the participants' income levels are compared with sub-dimensions of Perceived Seriousness, Perceived Obstacles, Physical Benefits, Psycho-social Benefits and Self-Efficiency, there is meaningful difference between the Self-Efficiency variables (p<0.05). As a result, it has been observed that the perceived seriousness of men who have children is higher compared to men who do not have children. In literature, a study conducted on women shows in contrast that, the scores of women who have children in terms of perceived obstacles and psychosocial benefits is higher in comparison to women who do not have children (Ertuzun and Karakucuk et. al, 2013). In the dual comparisons of self-efficiency sub-dimension of the participants with their educational level of the health belief scale in sportive recreation activities, it has been determined that the scores of those who have received faculty/academy education is higher in comparison to those who have received post-graduate education in terms of perceived seriousness variable.

Since participation in sportive recreation activities is willingly done with the purpose of enjoyment, it is significant in preserving and developing health. Therefore, participation in sportive recreation activities should be supported in all age groups throughout life, regardless of gender. Health belief scale related to sportive recreation activities measures beliefs and thoughts. Measurement of people's attitudes and these turning into behavior and displaying differences may be a new research area.

Keywords: Health, Health Belief, Leisure, Recreation, Recreational Activities Sportive

#### OP. 318 DEVELOPMENT OF LEISURE EDUCATION SCALE: PILOT STUDY

<u>Süleyman Munusturlar</u><sup>1</sup>, Coskun Bayrak <sup>2</sup>

- <sup>1</sup> Anadolu University Faculty of Sport Sciences
- <sup>2</sup> Anadolu University Faculty of Education

#### Abstract

#### Introduction

Leisure education which supports education process additionally to formal education has very important role in changing educational approach to enhance effectiveness of education process (Torkildsen, 1992, 25). Leisure education is a lifelong learning process which incorporates the development of leisure attitudes, values, knowledge, skills and resources (Sivan and Ruskin, 2000: 1). Leisure education is defined as a process to provide pedagogic, experimental and recreational experiences which serving cognitive, affective and psycho-motor learning domains related to wise use of leisure time (WLRA, 2001, 203).

Based on the basis of literature search, it is determined that there is few in if any leisure education researches in national literature, though, there are too many researches and publications in international literature. Additionally, it is not determine any scale to measure leisure education directly not only in national but also in international literature. By virtue of Leisure Education Scale (LES) which has been developed in this study, it may help to determine leisure education levels and effect of leisure education applications.

#### Aim of the Study

Aim of this study is explore factor patterns, analyze reliability and confirm factor patterns with leisure education sketch measurement tool which developed by qualitative study.

#### **METHOD**

In this part of study, taking part of measurement tool, sample of research and analyze techniques to reach results of the study.

#### **Data Collection Tool**

"Leisure Education Draft Scale Form" which first designed as 94 item with literature reviews and qualitative study but after simplified as 72 items by content validity and expert views was used as measurement tool to collect data.

#### **Population and Sample**

25.230 university student who study in formal programs in 2013-2014 education year is constituted to population of research. In this study quota sampling was used as 1,5% from every departments. For exploratory factor analysis (EFA) 400 students, for confirmatory factor analysis (CFA) 400 different students, in total 800 students sampled fort his study.

#### **Data Analyze Methods**

To explore factor patterns exploratory factor analysis used (SPSS 19), to confirm factor patterns and reliability analyzes confirmatory factor analysis used (LISREL 8.8).

#### **FINDINGS**

Before begining of the EFA Kaiser-Meyer-Olkin and Bartlett's Sphericity test performed. According to Kaiser-Meyer-Olkin test score (KMO) (.839) and Bartlett's Sphericity test score ( $X^2=5059.07$ , df: 703 ve p<0.001)

According to exploratory factor analysis, it is determined, structure which occurred 7 dimension and 38 items after simplifying techniques belongs to rule of overlapping and factor loadings. When investigate the lowest and highest factor loadings values, it has seen that social interaction skills (7 items) between .51 and .75, extrinsic motivation (7items) between .42 and .67, awareness (5 items) between .65 and .76, intrinsic motivation (5 items) between .51 and .86, boredom (5 items) between .59 and .68, problem solving (4 items) between .48 and .75, time management (5 items) between .55 and .79. These seven factors explain 53% of total variance.

At the end of the first level CFA,  $X^2/sd$ , RMSEA, CFI, NNFI, RMR, NFI, GFI ve AGFI adaptation index were investigated. It has been seen that,  $X^2/sd$ : 1271 / 644 = 1.97 (0  $\leq$   $X^2/sd$ ), RMSEA

index is 0.054, RMR is 0.056, NNFI and CFI index are higher than 0.90 and it means providing of adaptation values (Çokluk et al., 2010: 271-272; Raykov and Marcoulides, 2000: 38; Steiger, 2007).

At the end of the second level CFA, it has been seen that  $X^2/\text{sd}$ : 1392/658; p<.05] 2.11, RMSEA is 0.058 and RMR is 0.063, NNFI and CFI index are higher than .90 and it means providing of adaptation values (Çokluk et al., 2010: 271-272; Raykov and Marcoulides, 2000: 38; Steiger, 2007). It can be stated that GFI and AGFI indexes are close to .80 and adaptation index scores. According to this frame, it can be defined that structure which consists seven dimensions was corrected and dimension structure is valid.

#### **DISCUSSION AND RESULTS**

Finally, structures which was obtained to leisure education is parallel with leisure education approaches and models (Mundy and Odum,1979: 53; Edginton, 2004: 480; AAPAR, 2011: 26; Caldwell et al., 2004; Beddini at al., 1993; Mundy, 1998: 58) in international literature. In conclusion, it can be stated that item pool which was constituted after qualitative research was simplified as 7 dimensions and 38 items by EFA and this structure was corrected by CFA.

**Keywords: Leisure Education, Scale Development** 

# OP. 331 THE RELATIONSHIP BETWEEN TIME MANAGEMENT AND STRESS AMONG PHYSICAL EDUCATION AND SPORT SCHOOL STUDENTS

Cagdas Caz<sup>1</sup>, Volkan Aydogdu<sup>2</sup>, H. Mehmet Tunckol<sup>3</sup>, Erman Oncu<sup>3</sup>

- <sup>1</sup> Marmara University Department of Physical Education and Sport
- <sup>2</sup> Ondokuz Mayıs University Department of Physical Education and Sport
- <sup>3</sup> Karadeniz Technical University School of Physical Education and Sports

#### Abstract

#### **Objective**

The purpose of this study was to examine time management skills and stress levels of physical education and sport school students according to some demographic variables and to determine the relationship between their time management skills and stress levels.

#### Methods

The study was conducted on 283 physical education and sport school students (94 female and 189 male) who was enrolled in Karadeniz Technical University in 2013-2014 Spring Semester. Their ages ranged between 18 and 32 (M=22.09). In the study, the Time Management Inventory (TMI) and the Perceived Stress Scale (PSS) were administered on the participants as data collection tools. The TMI was first developed by Britton and Tesser (1991) in order to measure the time management skills of the university students. The inventory was translated into Turkish by Alay and Koçak (2002). The TMI was consisted of 27 items and all items were measured and sorted by using a five-point Likert scale. Its Cronbach Alpha reliability coefficient was measured as 0.83 for this study. The PSS developed by Cohen, Kamarck and Mermelstein (1983) in order to determine the perceived stress level was translated into Turkish by Yerlikaya and İnanç (2007). The scale was consisted of 10 items and the items were measured and sorted by using a five-point Likert scale. Cronbach Alpha reliability coefficient of the PSS was measured as 0.83 for this study. Descriptive statistics were performed on all of the variables. t-test, one-way ANOVA, Tukey post-hoc test, correlation analysis and regression analysis were used in the data analysis. Croanbach Alphas were calculated for the scales in order to evaluate their internal consistencies.

#### **Results**

The mean of the TMI and the PSS scores of the students who participated in this study was 3.14 and 2.91, respectively. Both the TMI and PSS scores of the participants differed significantly in respect to the gender variable ( $t_{TMI}$ =2.81, p=0.01;  $t_{PSS}$ =2.98, p=0.00). The female participants' average scores ( $M_{TMI}$ =3.25,  $M_{PSS}$ =3.06) were higher than the male participants' scores ( $M_{TMI}$ =3.09,  $M_{PSS}$ =2.84) for both dependent variables. There were significant differences in the scores of the participants' TMI

and PSS in respect to the independent variable which was the year of study at the university  $(F_{TMI}=3.75, p=0.01; F_{PSS}=3.99, p=0.01)$ . Whereas the TMI scores of the participants who taught at

 $3^{rd}$  (3.25) were higher than the participants for the freshmen (2.99), the PSS scores of the sophomores (3.08) were higher than the freshmen (2.70). According to the regression analysis, 7% of the variance in perceived stress level was predicted from the time management skills of the participants. Additionally, the results of the correlation analysis showed that the participants' TMI and PSS scores were significantly related to the participants' scores of the academic success ( $r_{TMI}$ =0.13, p=0.04;  $r_{PSS}$ =-0.15, p=0.02).

### Conclusion

It can be said that time management skills and stress levels of the participants were at the middle level. The female participants' time management skills and stress levels were higher than the male participants. The number of years the participants spend at the university play more significant role in time management skills and perceived stress levels. Our findings demonstrated that the participants' time management skills had important effects on determining their perceived stress levels. Additionally, whereas there was a positive correlation between the students' academic success and their time management skills, there was a negative correlation between the students' academic success and their perceived stress levels.

Keywords: Time Management, Stress, Physical Education and Sport School Student

#### OP. 340 EXAMINATION OF THE TEACHERS FREE TIME OPTIONS

Tuğba Yılmaz<sup>1</sup>, Betül Bayazıt <sup>1</sup>, Şebnem Telci <sup>1</sup>, Hakan Akdeniz <sup>1</sup>

<sup>1</sup> Kocaeli University School of Physical Education and Sports

#### **Abstract**

**The Purpose:** Free time is the left over time in humans working life and daily duties. People also use that time frame for personel development such as art, sport etc. In that case we intend to invertigate Ulugazi Primary Education School's and Bahçeşehir College's teachers in Kocaeli just because we want to learn about how this people use their free time.

**Process:** We gather the practice group and each school send 50 teachers to attend the study. We prepare 12 questions for study group and this questions is all about to learn their free time usage. And finally we examine the answers with SPSS 20.0 package program and obtain frequency and percentage data on charts.

**Findings:** The light of the obtained findings; When we asked study group about attending the free time activities 78 percent of public school teachers and 54 percent of private school teachers say 'no' to that question. When we compare the demografic characteristic of free time usage we didn't find any meaningful difference.

**Result:** In the research findings examination we find that teachers don't attend the recreational events. The main reason for not attending the recreational event might be the weakness of consciousness and convenience of the social environment. We must create new opportunities for teachers. Providing the necessary job and home is not enough.

**Keywords: Leisure Time, Teacher** 

#### OP. 348 AN EXAMINATION OF LEISURE ATTITUDE AMONG ADOLESCENTS

Sabri Kaya<sup>1</sup>, Halil Sarol<sup>2</sup>, Emanuele Isidori<sup>3</sup>

- <sup>1</sup> Kırıkkale University School of Physical Education and Sports
- <sup>2</sup> Gazi University School of Physical Education and Sports
- <sup>3</sup> Foro Italico University of Roma Iusm

#### **Abstract**

#### **Objective**

Nowadays, the recreation and leisure field directed great attention to measure the attitudes toward leisure from cultural perspectives. Therefore, the purpose of this study was to analyze leisure attitudes (cognitive, affective and behavioral) of Turkish adolescents according to some demographic variables such as; gender, participation in physical activity and school type.

#### Method

 $610~(n_{men}=333;~M_{age}=15.80~yr.,~SD=1.14~and~n_{women}=277;~M_{age}=15.66~yr.,~SD=1.01)$  students enrolled in this study from different high schools in Turkey. The Leisure Attitude Scale (Ragheb and Beard, 1982) was administered on the participants. The reliability and validity of the Turkish version of the Leisure Attitude Scale (T-LAS) were determined by Akgül and Gürbüz (2010). Cognitive, affective and behavioral items (12 per type) were rated on a five-point Likert scale. The participants were asked to rate each item on a 5-point Likert-scale ranging from 1 = strongly disagree to 5 = strongly agree. Descriptive statistical methods and MANOVA were used to compare the differential scores of the three subscales of the T-LAS among the demographic variables. Correlation analysis was also used to test the relationship between T-LAS subscales and age.

#### **Results**

The cognitive subscale scores of the students who participated in this study were the highest toward leisure. MANOVA analysis indicated no significant (p > 0.05) mean differences in all three subscales with regard to gender. However, there were no significant main effect of participation in physical activity on "T-LAS" scores [ $\lambda$ =0.989, F(3, 596)=2.155, p<0.01], a follow-up univariate analysis indicated significant main effects for participation in physical activity on the subscales of "Cognitive" [F(1, 598)=5.790, p<0.05], "Affective" [F(1, 598)=5.609, p<0.05], "Behavioral" [F(1, 598)=5.097, p<0.05]. Participants groups had higher mean attitude scores than the non-participants in all subscales of T-LAS. Additionally, MANOVA indicated significant main effect of school type on "T-LAS" scores [ $\lambda$ =0.918, F(3, 596)=2.334, p<0.05], in tests between subject effects by school type, results also revealed a significant differences in the "Cognitive" [F(2, 597)=6.194, p<0.05], "Affective" [F(2, 597)=5.264, p<0.05], "Behavioral" [F(2, 597)=4.371, p<0.05] subscales. Private high schools' students had higher scores than the others. Significant correlations were not found between three subscales of T-LAS and age (p > 0.05).

#### Conclusion

It can be concluded that the women participants had lower attitudes toward leisure than the men. While the highest leisure attitudes mean score in affective subscale, cognitive subscale is the lowest score. We suggest longitudinal studies to investigate the changes attitudes towards leisure over time.

Keywords: Leisure, Attitude, High School Students, Adolescents

# OP. 359 INVESTIGATION OF THE RELATIONSHIP BETWEEN THE FACTORS THAT AFFECT LIFE QUALITY AND LEISURE PREFERENCE AMONG HIGH SCHOOL STUDENTS

<u>Utku Işık</u><sup>1</sup>, Duygu Harmandar Demirel <sup>1</sup>, Sinan Bastacı <sup>1</sup>, Emre Durgun <sup>1</sup>

#### **Abstract**

**Purpose:** The aim of this study; investigating the life quality in terms of different variables among high school and we try to answer the question; which leisure activity provides a more quality.

**Method:** Survey method was used in this study, this method was used widely in descriptive research model, carried out on large groups, is tried to be described as facts and events in their own condition. In this study as data gathering tool in addition to leisure preference list (49 items) organized by the researchers and World Health Organization Quality of Life Insturement (WHOQOL-BREF), Turkish adaptation held by Fidener and et. al. (1999) was used. Scale was development by The World Health Organization (WHO) Quality of Life Group for assess how perceive their own quality of life of participant.

**Study Group**: The study group was consisted of 210 high-school students (99 male 111 female,  $X_{age}$ =16.04, SS= 1.00) who studying in Kutahya High School, in May 2014.

Analysis of Data: The data evaluated with SPSS 21 for windows package program. In the evaluation of data first reliability analyses made for the sampling group and then One Sample Kolmogorov Smirnov test made as a normality test. Also in addition to descriptive statistics tests percentage (%) and frequency (f), i Independent sample t-test and ANOVA made for significant differences (p=0.05) (Wilkinson, 1999).

**Results:** According to t test results significant differences in gender variables with mental (t=3.904;p<0.05) sub dimensions. Male have high scores than female. ANOVA results according to class of the participants who 1st grade students have significantly higher than 2nd-3rd grade students in mental subscale, physical subscale, social subscale. In addition, 1st grade students have significantly higher than 3rd grade students in environmental subscale (F=6.105; p<0.05). According to t test results significant differences in book-magazine-newspaper readers with social subscale. Book-magazine-newspaper readers have high scores than not. (t = 2.097, p <0.05).

**Conclusion:** 1<sup>st</sup> grade students have higher life quality than the others grade. According to analysis; generally, levels of participation in activities doesn't affect on life quality, except book-magazine-newspaper reading activities.

Keywords: Life Quality, Recreation, Recreation Activities

OP. 389 RELIABILITY AND VALIDITY STUDY OF THE OBSERVED AND REALIZED CHANGES BY CAREGIVERS IN APPLIED ADJUVANT SPORTS THERAPY FOR BREAST CANCER WOMEN'S LIFE AND CAREGIVERS LIFE, COMPARISON THE CHANGES WITH RESPECT TO SOME DEMOGRAPHICS VARIABLE: ANTALYA CASE

 $\underline{\text{Faik Ardahan}}^1$ , A. Hande Uludağ $^1$ 

#### Abstract

There are two main purposes of this study; first; is to developed the scales "The Observed Changes by caregivers in Life of The Breast Cancer Women in Remission Applied Adjuvant Sports Therapy (MKHDO)" and "The Realized Changes in Caregivers' Life who Give Patient Care for Breast Cancer Women in Remission Adjuvant Applied Sports Therapy (BHVDO)", second; is to compare the changes in patients and their caregivers life with respect to some demographics variables. This is a descriptive study and sampling group consisted of 98 persons who are spouse, child, parents, sisters,

<sup>&</sup>lt;sup>1</sup> Dumlupınar University School of Physical Education and Sports

<sup>&</sup>lt;sup>1</sup>Akdeniz University School of Physical Education and Sports

friends, neighbors and close relatives of caregivers of 20 volunteer women with breast cancer in remission who take 16 weeks regular sport therapy.

The exploratory factor analysis, Kaiser Mayer Olkin (KMO) test and Bartlett Sphericity test were conducted for both scales. In order to analyze the data, the descriptive statistics methods, Cronbach's Alpha internal consistency test, Pearson Correlation Test for item factor correlation, Mann Whitney U and Kruskal-Wallis test were applied and results have been assessed according to significant levels 0.01 and 0.05.

Scales items for MKHDO and BHVDO were formed in two steps; first items collected from Quality of Life Scale, and Heyland ve Tranmer (2001), Tsai (2005), Dowling (2010) and Crickmore's (2010) studies and second, these items asked to Caregivers and Patient's Relative with the open ended questioned interviews, then all items and answers were grouped and asked to 18 Caregivers and Patient's Relatives to check language and meaning validity. MKHDO contains 22 items and 5 sub dimension, KMO=0,756, Bartlett Sphericity test p<0,000 and Cronbach's Alpha=0,939, BHVDO contains 8 items and 2 sub dimension, KMO=0,806, Bartlett Sphericity test p<0,000 and Cronbach's Alpha=0,929. The name of sub dimensions of in MKHDO are "Decrease in Complaint and fatigue, Cronbach's Alpha=0,916", "Leadership Capability and Success, Cronbach's Alpha=0,884", "Increase in Optimism, Cronbach's Alpha=0,884", "Feeling Strength, Cronbach's Alpha=0,809", and "Increase in self-confidence, Cronbach's Alpha=0,777", the name of sub dimensions of MKHDO are "Make Effective Time Management, Cronbach's Alpha=0,931" and "Decrease in Worries About Their Patient and Illness, Cronbach's Alpha=0,647". The sampling size evaluated by their common variance. It is necessary to take high base value (MacCallum et al., 1999). Even if n<100, if common variance of items were greater than 0,600, the sample size can be accepted sufficient (Field, 2005). Because of this reason, in this study the items which has 0.6 and above common variance value were taken in considirations and sample size were satisfied as statistically. Any of the items in the pool were excluded from analysis, because of satisfied common variance and meaningfull replacement in to

As a result of this study; first; Because of the Kaiser Mayer Olkin test, Bartlett Sphericity test and Cronbach's Alpha values were satisfied, the scales of MKHDO and BHVDO were valid and reliable scales in the estimation of the affect of adjuvant sport therapy for breast cancer women's life in remission and the affect of their caregiver's life, second; it was observed positive changes in "Complaint and fatigue", "Leadership Capability and Success", "Optimism to Life", "Feeling Strength", and "Self-confidence" by their caregivers in breast cancer women who follow regular physical exercise and sport therapy program, and caregivers declared that they have ability to make effective time management and decrease in worries about their patient and illness after adjuvant sport therapy applied for their patients.

Keywords: Breast Cancer, Caregivers, Patient's Relative, Adjuvant Sport Therapy

# OP. 488 DIFFERENCES IN THE PERCEPTION OF CONSTRAINTS AND MOTIVES ON LEISURE TIME EXERCISE PARTICIPATION

Esra Emir<sup>1</sup>, Bülent Gürbüz<sup>2</sup>, Erman Öncü<sup>3</sup>

#### Abstract

Objective: There has been a considerable research revealed the important effects of leisure time participation on health and fitness (Pastor, Balaguer, Pons & Garcia-Merita, 2003). The result of these studies clearly presents that regular exercise has many physiological and psychological benefits (Henderson & Ainsworth, 2002; Zuzanek, Robinson & Iwasaki, 1998). Even though, some research in the literature indicated that a significant part of the world's population fails to perform recreational exercise at the recommended level a day (Rhodes & Dean, 2009). For this reason, it is important to

<sup>&</sup>lt;sup>1</sup> Hacettepe University Faculty of Sport Sciences

<sup>&</sup>lt;sup>2</sup> Kırıkkale University School of Physical Education and Sports

<sup>&</sup>lt;sup>3</sup> Karadeniz Technical University School of Physical Education and Sport

conduct researches for identifying the factors that motivate or constraints individuals to participate in exercise. Therefore, the purpose of this study was to examine motives and constraints to recreational exercise participation and compare differences with respect to some demographic variables.

Method: The participants of this descriptive research were 260 male (Mage =  $20.82\pm2.33$ ) and 146 female (Mage =  $20.58\pm2.35$ ) from different universities. The "Leisure Constraints Questionnaire" (LCQ) developed by Alexandris and Carroll (1997) was used to measure students' perceptions of constraints on exercise participation. The reliability and validity of the Turkish version of the T-LCQ was re-tested by the Gürbüz, Öncü and Emir (2012) with the Confirmatory Factor Analysis method. It consists of 6 subscales and 18 items and all items were measured by using 4-point Likert-scale. Furthermore, the "Recreational Exercise Motivation Measurement" "REMM" developed by (Rogers & Morris, 2003) were used to measure motives for participation in recreational exercise. The reliability and validity of the Turkish version of REMM (T-REMM) for Turkish participants were obtained in a study by Gürbüz, Aşçı and Çelebi (2006). The T-REMM consists of 5 subscales and 66 items, and the participants were asked to rate each item on a 5-point Likert-scale. Descriptive statistics, Multivariate Analysis of Variances (MANOVA), and Pearson Correlation analysis were used to analyze the collected data. Cronbach's alphas were calculated for the scales in order to evaluate their internal consistencies.

Results: MANOVA analysis indicated no overall significant main effect of gender on the subscales of T-LCQ [ $\lambda$ =0.998, F(6, 399)=0.161, p>0.05] and T-REMM [ $\lambda$ =0.989, F(5, 400)=0.911, p>0.05]. Analysis indicated an overall significant main effect of frequency of exercise participation on the subscales of T-LCQ [ $\lambda$ =0.912, F(6, 399)=2.891, p<0.01]. A follow-up univariate analysis indicated significant main effects for frequency of exercise participation on the subscales of "Lack of Knowledge" [F(2, 403)=5.246, p<0.01], "Lack of Partners" [F(2, 403)=9.207, p<0.01], "Time" [F(2, 403)=4.331, p<0.05], and "Lack of Interests" [F(2, 403)=3.280, p<0.05]. The mean scores of the non or rarely participants were higher than the others. MANOVA indicated significant main effect of frequency of exercise participation on "T-REMM" scores [ $\lambda$ =0.918, F(5, 400)=6.27, p<0.01], in tests between subject effects by frequency of exercise participation, results also revealed a significant differences in the "Health" [F(2, 403)=4.789, p<0.01], "Appearance" [F(2, 403)=11.085, p<0.05] and "Skill Development" [F(2, 403)=4.992, p<0.05] subscales. As the frequency of exercise participation increased the mean scores decreased.

The analysis indicated that, there was significant main effect of exercise type on T-LCQ [ $\lambda$ =0.964, F(6, 399)=2.485, p<0.05] an T-REMM [ $\lambda$ =0.916, F(5, 400)=7.304, p<0.05] scores. ANOVA analysis revealed significant differences in "Facilities" [F(1, 404)=6.319, p<0.05] and "Lack of Partners" [F(1, 404)=10.148, p<0.01] subscales of T-LCQ, and "Competition" [F(1, 404)=20.993, p<0.01] and "Social and Enjoyment" [F(1, 404)=27.172, p<0.01] subscales of T-REMM. Individual exercisers had lower mean scores than the others in all subscales. Furthermore, the results of Pearson correlation analysis indicated no significant relationship between age and "T-LCQ" scores (p>0.05) but there were significant and negative relationship between age and subscales of "Competition" and "Skill Development" of the "T-REMM" (p<0.05).

Conclusion: Overall, it can be concluded that, "Facilities" is the biggest constraint individuals from taking part in exercise participation, and "Skill Development" is the most important factors that motive to exercise participation. The perception level of constraints and motivation level of the participants were over the medium level. A methodological limitation of this study was that the sample size was relatively small and the entire sample was selected from only selected universities. Despite the sample limitations, this study provided some additional information to leisure literature related to exercise motives and constraints from Turkey as a non-Western country. Future studies might be conducted with participants from different ages, different cities, or individuals in different exercise environments. Further, future studies could use qualitative methods to provide a way of elaboration and contextualizing statistical facts, and also allow for a level of depth analyses that quantitative analyses cannot provide.

Keywords: Exercise, Recreation, Motivation, Constraints

# OP. 502 ASSESSMENT OF NATURE CAMP ACTIVITIES OF THE MINISTRY OF YOUTH AND SPORTS AS A YOUTH ACTIVITY

Melike Esentas<sup>1</sup>, Pınar Güzel<sup>2</sup>, Selhan Özbey<sup>2</sup>

#### **Abstract**

The Ministry of Youth and Sports responsible for providing opportunities in order to support the personal and social developments and self-improvement of youth and executing activities ensuring active participation of youth in decision-making, implementation processes and social life, organizes Youth Camps in accordance with its Youth Services.

#### Purpose:

It is aimed for the camp leaders to assess the Nature camp activities organized within the scope of Youth Camps organized by the Ministry of Youth and Sports. The effects of these nature camps on young people have been analyzed in accordance with the obtained assessment criteria.

#### Method:

The case study method as one of the qualitative study techniques has been applied in the study. The "easily accessible case sample" method as one of the purposeful sampling methods has been preferred while determining the sampling method. The profiles of 23 camp leaders and the program officer who have voluntarily accepted to participate in the survey are given in the Table 1. The "interview" approach has been chosen as the data-collection method of this study and "the semi-structured interview" forms have been prepared in accordance with that approach. The interview form which has been applied in the study is consisted of two parts as the personal information of the participants and the questions prepared on the subject of the study. The interviews have been held throughout the camp term (summer period of 2012) when the participants are available.

#### The Findings:

The codes obtained as a result of the analysis performed in accordance with the opinions of the leaders and program officer of the Nature Camp of the Ministry of Youth and Sports are given in the Table 2. It has been indicated by the leaders that the camps have impact on the social acquisitions such as socialization, cultural interaction, group belongingness and communication as well as provided contributions to self-development such as self-confidence and self-awareness of young people.

The leaders have indicated positive and negative opinions related with the activities and organizations in the programs of nature camp.

#### Result

According to the obtained results, it has been concluded that the Youth camp activities organized by the Ministry of Youth and Sports on throughout the country become effective on personal and social developments of young people. The Leaders of the Youth Camp have indicated that the program applied during the camp term have negative impacts as well as the positive ones. The participants made some recommendations for the "camp leader" training by attaching importance on some particular issues.

Keywords: Ministry Of Youth And Sport, Youth Camp, Youth Camp Leader

# OP. 520 LEADERSHIP BEHAVIORS OF THE YOUTH CAMP LEADERS, PERCEPTION BY PARTICIPANT EVALUATION

Cenk Temel <sup>1</sup>, <u>Seçkin Doğaner</u><sup>2</sup>, Aysel Namlı <sup>1</sup>, Velittin Balcı <sup>2</sup>

#### **Abstract**

Aim: The aim of this research is to present how the trainers who are involved at Youth Camps

<sup>&</sup>lt;sup>1</sup> Batman University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Celal Bayar University School of Physical Education and Sports

<sup>&</sup>lt;sup>1</sup> Inönü University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Ankara University Faculty of Sport Sciences

organized by Ministry of Youth and Sports are perceived by the youth participants by the help of metaphors.

Method: This research is a qualitative study in the pattern of phenomenology which analyses 'leader' perception of participants by the help of metaphors. Metaphor (noun, literature, figurative expression) gives the opportunity to express a strong expression within less words and it is defined as "an expression used for a different meaning rather than its actual meaning as a result of knowledge or simile. The data of the research is obtained from participants who attended to youth camps in Karabük and Bolu throughout the summer term in 2014. While collecting data process, a researcher stayed in the camps we mentioned, gave required information about the questions in the interwiev form to the participants and gathered data stating that the answers would be used for a scientific research. The collection of data, demographic specialties of the participants were utilized in the first part and in the second part, semi-structured interwiev form containing open ended questions which are for specifying perceptions of the participants by metaphor is utilized. Open ended questions are in the form of fill in the blanks for instance, Youth Camp Leaders are ...... because ...... Collected data firstly analyzed by content analysis. For this aim, the metaphors were determined, classified and finally categorized. The tables of frequency and percentage were created. Thus participants are asked to complete the open ended questions. Quotations that were thought meaningful for the research were selected for each question.

Findings: According to the findings, 144 female (57%) and 109 male (43%) campers attended to the research (total 253 campers). 98.4% of the participants are (lise) high school students and 1.6% of the participants are university students. It is determined that participants produced 73 different metaphors and they have perception formation in 6 different categories according to the evaluation of metaphor sources. "Compassion provider and protective leader" category; for this category 44.2% of the participants stated that the leaders behaved them mercifully and they didn't leave them alone and they protected and cared them and they exhibited to much love. "Leader in model behavior category"; for this category, 22.5% of the participants stated that they are influenced by the leaders and leaders contributed for their positive behaviors. "Leader in the role of directing category"; for this category, 12.6% of the participants stated that the leaders led them and directed them to specific fields and acted guided behaviors. "Leader in disciplinary behaviors category"; for this category, 6.7% of the participants mentioned especially about authoritarian and domineering behaviors of the leader. "Leader in educative role category"; for this category, 7.9% of the participants emphasized that the educative role of the leader was more dominant. "leader in irresponsible behavior"; for this category, 3.9% of the participants mentioned about irresponsibleness and unpunctuality of the leader.

**Result:** when the produced metaphors are evaluated in general, it could be said that leaders involved at the youth camps had positive effects on the participants and guided and led them to positive behaviors with their positive and exemplary behavior and personality. In "leader in educative behavior category", authoritarian attitude of the leader was mentioned but there was no negative expression. Emphasize on leader's negative behavior was mentioned a bit in the "leader in irresponsible behavior category".

Keywords: Camp Leader, Youth Camp, Metaphor

# OP. 521 ACCORDING TO THE PARTICIPANTS' PERCEPTIONS, EVALUATION OF YOUTH CAMPS IN TURKEY, AS A COMMON LIVING PLACE

Cenk Temel <sup>1</sup>, <u>Aysel Namlı</u> <sup>1</sup>, Seçkin Doğaner <sup>2</sup>, Velittin Balcı <sup>2</sup>

#### Abstract

**Aim:** The aim of this research is to put forward how participant youths perceive the "youth camps" being performed by the Ministry of Youth and Sports.

**Method:** This research is a qualitative study analyzing the participants' perceptions on youth camps through the metaphors by phenomenologic method. Within the qualitative research approaches, the

<sup>&</sup>lt;sup>1</sup> Inönü University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Ankara University Faculty of Sport Sciences

usage of metaphors is important with regard to receiving more profound opinions from individuals and making sense their feelings, opinions and emotions. The research data are collected from totally 273 people including men and women participating youth camps on Karabük and Bolu in summer 2014. While collecting data process, a researcher stayed in the camps we mentioned, gave required information about the questions in the interwiev form to the participants and gathered data stating that the answers would be used for a scientific research. Participants, in the first part, fill interview form including their demographic features and in the second part, with the aim of designating participants' perceptions, they fill interview form semi-structured with open ended questions. In the open ended question, it is required to complete this sentence "Youth camp is like ......Because......." Collected data firstly analyzed by content analysis. For this aim, the metaphors were determined, classified and finally categorized. The tables of frequency and percentage were created. Thus participants are asked to complete the open ended questions. Quotations that were thought meaningful for the research were selected for each question.

Findings: According to acquired findings, in total 273 campers including 142 women (% 52) and 131 men (%48) participated to the research. High school students comprise %92,3 and as for university students, they are %7,7. Participants produced 117 different metaphors and when metaphors resources are evaluated, it is determined that their perceptions form in 7 different categories. In the categories of "camp as a place for experience" (%29,3) and "camp as a place for seeing improvements" (% 11), it is mentioned some situations such as "experiencing some first experiences in the camp" and "bringing innovation to their lives". It is mentioned rule and practices in the categories of "camp as place for fraternity" (%15,3) especially with people from different places and cultures, "camps as place for intimate relations, entertaintment and pleasure" (%19,8), "camps as place for disciplining, entertaining feature" (%12,1). Participants also deal with metaphors referring intimate relations in camp and these produced metaphors come up in the category of "camp as a place for sympathy and cooperation" (%7,3). As to in the category of "camp as place for feeling relieved" (%5,1), there are metaphors related to participants' feeling relaxed or having a rest in these camps.

**Result:** When participants' opinions are evaluated generally, it can be said that there aren't many negative metaphors; almost all of these negative metaphors mention about camps' being notably disciplined. Accordingly, it can be said that Youth Camps especially support youths' social and affective progress; at the same time, make a major contribution to social peace by creating common living places.

**Keywords: Youth Camp, Metaphor** 

# OP. 545 THE DETERMINATION OF CONSTRAINTS ASSOCIATED WITH THE UNIVERSITY STUDENTS' PARTICIPATION IN RECREATIONAL ACTIVITIES (A SAMPLE OF SELCUK UNIVERSITY)

 $\underline{\text{Mehmet Altin}}^1$ , Yusuf Barsbuğa $^1$ 

#### Abstract

This research was done to investigate why the students of Selcuk University did not join in recreational activities in their leisure time and which factors prevented them from participating in these ones. Totally 448 students including 190 females and 258 males who studied in the academic year 2013-2014, participated in this research. In determination of constraints associated with the students' participation in recreational activities, "The Leisure Constraints Scale" developed by Alexandris and Carroll (1997), adapted into Turkish by Karaküçük and Gürbüz (2007) and newly tested on the factor structure with the confirmatory factor analysis by Gürbüz et al. (2012) was used as a data collection tool. Data were statistically analyzed, any changes in leisure time perceptions were determined in the independent groups with T-test (Independent-Samples T test) and One Way Analysis of Variance (Anova). Tukey test was also used to analyze the differences between the groups. As a result of this study, within the students' perceptions about leisure, in accordance with

<sup>&</sup>lt;sup>1</sup> Selcuk University School of Physical Education and Sports

the Gender and Income Variables; there was not any significant difference in the sub-dimension of information deficiency, facility, friend and time and total value; in accordance with the Students' Grades; there was a statistically significant difference in the  $4^{th}$  grade average value (9,09±2,32), lower than the arithmetical average value relating to the  $1^{st}$  grade (7,65±2,63) (P<0.05). At the same time, the arithmetical average value relating to the  $4^{th}$  grade (9,09±2,32) was statistically different in favour of the  $4^{th}$  grade students rather than the value concerning the  $2^{nd}$  grade (7,97±2,71). Also, any significant difference was not found in the sub-dimension of an individual's psychological situation, information deficiency, facility, friend, time among the students doing sport and not doing it.

**Keywords: Recreation, Leisure Time, Perception** 

# OP. 568 DETERMINATION OF THE EXPECTATION LEVELS OF PARTICIPANTS WHO PREFER VOLLEYBALL BRANCH WITHIN SPORT PROJECT IN CAMPUS

Yüksel Savucu<sup>1</sup>, Mustafa Karadağ<sup>1</sup>, Fethi Yıldırım<sup>2</sup>, Yonca Süreyya Biçer<sup>1</sup>, Hüseyin Çağdaş Batmaz

#### **Abstract**

In this study; it was aimed the determination of the expectation levels of participants who prefer volleyball branch within Sport Project in Campus by means of questionnaire.

The research population was consisted of athletes in Firat University campus and the sample also who prefer the volleyball branch. Yıldız (2006) and Savucu (2012) surveys were used in this research. The SPSS program was used to analysis the data. Answers indicating the different characteristics of participants who prefer volleyball branch were evaluated separately. Results were interpreted according to the percentage and frequencies. Statistical analysis for comparison was determined in p<0.05 significance level.

As a result; it was observed that the majority of participants prefer volleyball branch in accordance with the interests and desires. The most important factor in starting the branch of participants is their requests. In addition, participants first want to resume their lives as athletes.

Keywords: Campus, Volleyball, Athlete, Expectation

<sup>&</sup>lt;sup>1</sup> Firat University Faculty of Sport Sciences

<sup>&</sup>lt;sup>2</sup> Ministry of National Education

#### OP. 9 STUDY OF THE PEER SUPPORT LEVELS AMONG COLLEGE STUDENTS

Erdoğan Tozoğlu<sup>1</sup>, Gökhan Bayraktar <sup>2</sup>, Bilal Cingöz <sup>3</sup>, Serkan Tevabil Aka <sup>2</sup>

- <sup>1</sup> Atatürk University Kazım Karabekir Faculty of Education, Department of Physical Education and Sport
- <sup>2</sup> Ağrı İbrahim Çeçen University School of Physical Education and Sport
- <sup>3</sup> Ağrı İbrahim Çeçen University Institude of Social Sciences

#### Abstract

In a society, highness of the concept of helpfulness and supportiveness levels among individuals of similar age is related to the level of support among individuals. The purpose of this study is to determine the variables that can affect the level of peer support students can get and the effects of peer support on the social accomplisments.

Total of 674 students, 288 female and 386 male, from various departments at Ataturk University participated in this study. Data collection was done according to the peer support scale developed by Caliskan and Cinar (2012). The scale is comprised of three subscales: physical support, academic support and emotional support. The statistical significance, alpha level, of the scale is calculated to be 91. In the analysis frequency distribution, in the calculation of the sum of the scores obtained from subscales one-sample statistics, in the comparison of two independent variables t test, in the comparison of more than two independent variables ANOVA is utilized. The differences among views of different groups is evaluated with p:0.05 significance level.

According to the findings, it is observed that the college students' average scores obtained from the subscales are as follows 22.089 in physical support, 9.706 in academic support and 10.056 in emotional support. It is noted that there are significant differences in average scores obtained by the students from the subscales with respect to students' gender, age, physical locations, academic departments, sporting habits, sporting types and sporting durations. It is observed that the students with sporting habits tend to have higher peer support than those with no sporting habits. In conclusion, students' social lives, supporting habits, peer support and collaboration levels can be increased by promoting and supporting the students' involvement in sporting activities.

Keywords: Peer, Peer Support, Sport Social Life

# OP. 36 REHABILITATION ON ATHLETES WHO WAS EXPOSED TO SPORT INJURY: FOCUS GROUP STUDY

Nalan Filiz Aksakal <sup>1</sup>, Tuba Sevil <sup>1</sup>, İzzet Kırkaya<sup>1</sup>

#### Abstract

#### Introduction

Coming across with some kinds of injury is inevitable while sport is being done no matter on which level amateur or professionally. Traumas which happen during athletic performance can cause physical damage and these physical damages can end up with various psychological reactions on athletes. Moreover, the stress of being able to come back to sport with the old physical and mental capacitycan cause positive or negative effects in the process of rehabilitation. When the literature was analyzed, it could not be reached to the old performance like before the injury because of the physical effects of sports injury and the psychological effects of this physical damage. In this study, facing to their injury of the athletes who was exposed to sport injury and rehabilitation process, the psychological problems which the injury caused and their views were examined with a focus group.

#### Method

19 athletes from different branches (12 men and 7 women) were included in three different focus group studies which continue about 58 min. 37 sec. 3 min. 19 sec. Categories and sub categories

<sup>&</sup>lt;sup>1</sup> Anadolu University Faculty of Sport Sciences

which appearedwere formed by deciphering the data which was obtained.

#### Results

At the end of the study, six main categories were determined as the psychological effects of the injury, rehabilitation after the injury, the reasons of coming back to sport, the contribution of the rehabilitation process, the dilemma about it is an occupation or not and 90+ (tiebreaker).

#### **Discussion**

Naylor (2008) indicated in his study that targeting in the process of rehabilitation after injury and wanting to come back have positive effects. Also in our study, parallel views were discussed in the category of the reasons of coming back to sport. Even if Graffin and his colleague. (2000) told that most common and debilitating injury is anterior cruciate ligament injury (ACL), it is analyzed that the athletes who were exposed to this injury come back beter than in the past in the rehabilitation process with isokinetic dynamometer results in the category of the contribution of rehabilitation process in our study.

Keywords: Sports Injuries, Rehabilitationi Focus Group

# OP. 46 DETERMINING THE AGGRESSION LEVELS OF SPECTATORS INVOLVED IN EVENTS IN FOOTBALL COMPETITIONS

Savaş Şanlı<sup>1</sup>, Mehmet Güçlü<sup>2</sup>

#### Abstract

**Objective:** The main purpose of this study is determining the aggression levels of spectators involved in events and punished in football competitions. The correlation between aggression levels and the demographic variables including age, marital status, education level, occupation, monthly income, mental illness, using alcohol, being member of fans groups, doing sport before, resident with whom, with whom lived childhood and place of residence were examined and identified personality traits.

**Method:** This study is conducted on 169 spectators involved in events and punished in football competitions. The information concerning the aggression levels of spectator, which served as the dependent variable in this study, was collected by using "Aggression and Violence in Sports Spectators Scale." The information concerning identifying personality traits of spectators, which served as the dependent variable in this study, was collected by using "Eysenck Personality Questionnaire." The details concerning the independent variables were collected through "Personal Information Form". Data analysis using the Mann-Whitney U test, Kruskal-Wallis H test, Pearson correlation coefficient, one-way variance (ANOVA) and multiple regression analysis were conducted.

**Results:** The study revealed that significant differences were found between agression levels of spectators with the "with whom the place of residence, place of residence, using alcohol, being member in fan groups". In addition, a significant difference compared to the level of aggression that can be examined personality dimensions neuroticism and psychoticism personality dimensions vary significantly.

Conclusions: Findings that obtained from the study revealed that, there were multiple factors that effect spectators to involve in such events. When we consider the result of this study, or other studies that were done before, it is clear that some deterrent and preventive precautions must be conducted. We must consider security of other spectators who don't involve in violent events. Determining the minimum standards of the sports fields, building new fields according to these standards and modernizing old fields according to these standards can be consider among deterrent and preventive precautions. Illegal tools (such as knives, stones etc.) and drunk must be banned from entering the stadiums. The supporters should be organized under the roof of legal associations and stay away from politic and economic benefits. Supporter groups that can't be controlled may cause violent events inside and outside the stadiums. Preparing a social and educational environment will contribute a sports culture to be formed. Obtaining access of spectators and supporters to the sporting events will

<sup>&</sup>lt;sup>1</sup> Police Academy Faculty of Security Sciences

<sup>&</sup>lt;sup>2</sup> Gazi University School of Physical Education and Sport

also contribute to this process. Incremental punishments should be impose in case the spectators repeat any kind of criminal action.

Keywords: Aggression and Violence of Spectator in Football, Hooliganism, Neuroticism and Psychoticism

# OP. 48 THE EFFECTS OF THE ANCIENT ANATOLIAN CULTURES TO ANCIENT GREEK SPORTS

Ayda Arpak Kaya<sup>1</sup>, Nurullah Candan <sup>1</sup>

<sup>1</sup> Celal Bayar University School of Physical Education and Sport

#### **Abstract**

#### **Purpose**

European centrist theories that were developed in the 19th century when Europe was ahead of other civilizations, for which the evidences had been collected in the last few centuries, are based on modern European civilization and underdeveloped Eastern regions (Bernal). Western civilizations whose roots can be found in Anatolia, is shooted forth to Hellas, the other side of Aegean region. As Anatolian-Ionians are 'givers' and Hellas-Dors are 'takers' and although this relationship is very well known, creators were still considered as 'Hellen' and it is clearly known that eliminating prejudices against a dogma, as a step taken under the guidance of science, is harder than splitting an atom, the objective of this study is Ancient Greece was inspired by its relations with Anatolia in the organization of the Olympic games, the purpose of this research is to try to explain that ancient Olympic games and the phenomenon of sports did not develop from ancient Greece, but from the cultures of Egypt and Mesopotamia and the thousands old cultural heritage of Anatolia.

#### Method

The model of descriptive research has been used in this research. Descriptive researches are observations that describe what events, objects, entities, organizations, groups and various areas are. They are approaches which aspire to describe a situation that existed in the past or which still exists as it is. These kinds of observations, by trying to express the situations, conditions and characteristics entirely as they are, attempt to define events within their natural surroundings (Karasar, 2005). A comprehensive research in the area of sports sciences concerning ancient Olympics and the beginning of the Olympics not being encountered in our country has been determined as the most distinct significance of this research. In the research, a detailed literature review concerning the Ancient Olympic Games, Anatolia, Mesopotamia and Egypt has been conducted by the researcher.

### **Findings And Conclusion**

The description of history sometimes reaches dimensions which exceed human patience. In particular, what incredible dimensions ancient Greek history has extended to throughout centuries form the perspective of ideology and cultural exploitation and the tackling of fait accompli that are crated almost becoming impossible are exemplarily apparent (Ünal, 2005). The Olympic Games, which were the predecessor of modern games in ancient Greece, were the most popular among all games. The Olympic Games were organized in Olympia every four years as part of a festival held on behalf of Zeus and lasted for five days (Bingham, 2002). Concerning the beginning of the Olympic Games, we can search for the numerous legends seen within Greek history or for a more believable or realistic origin (Friedell, 2004). Well then, who is the predecessor of the Pan-Hellenic Games? The answer to this question all of a sudden takes us from the Greece mainland to the opposite shore, passes us through Asia Minor (Anatolia) and then slowly leaves us in front of the ramparts of Troy, the city of Priamos, because the predecessor who created, nurtured and raised the idea of sports unique to the Greeks (without doubt, one should not forget the characteristics of sports games belonging to the previous cultures that influenced Greek understanding of sports) is the fertile territories of Asia Minor (Dürüsken, 2012). Anatolia was in a leader position at cultural area, during 8, 7 and 6 thousand B.C. The Hattians (2500-2000 B.C.), Hittites (1666-1190 B.C.), together with Egypt, were one of the super states of the world in that period. The Helens (1050 B.C.-395 A.D.) came to recognize Mesopotamia's two thousand year old rich mine of information through the young Hittite principalities living in the southeast of Anatolia (Gardiner, 1930). Some historians emphasize the possibility of Hittite sports having influenced Greek sports. In Homer's work entitled The Iliad, many organizations that show parallelism with those of the Hittites taking place in the funeral games competitions can be displayed as an example to this. Six of the eight sport branches in these games show similarity to those of the Hittites (boxing, wrestling, running, struggle sports, discus and archery). Furthermore, historians have observed that horse race and javelin throw, two events shown to be Greek, had already previously existed among the Hittites (Crowther, 2007). While Anatolia had mostly developed its relations with its neighbours in the east or south (Mesopotamia, Middle East, Egypt) during the most ancient periods of history, the Greeks had opened these territories to Western culture. Anatolian gods like Kybele and Artemis travel to Greece, Rome and even to the most western points of Europe by setting sail from the shore. (Desti, 2009). The type of demonstrations (festivals), whose origins are accepted to date back to old times, to the Minoan Civilization (2000 B.C.), which benefits from the competences of the human body concerning balance, coordination and briskness and which entirely depends on accurately applying body control, also being used in Hittite culture is an indication that it should not only be attributed to Aegean geography (Karaöz Arıhan, Gültekin, 2012). A long time before the ancient Olympics, Egypt was already in a sports movement carrying certain significance (Toschi, 2010). More than 400 mural paintings entailing wrestling techniques were found in Beni Hasan which was located in Central Eygpt in 2000 B.C. (Miller, 2004). According to some historians thoughts are that Olympics program are sports that have been practiced for centuries and that these sports have not been discovered by the Greeks, but have come from the regions of Mesopotamia, Anatolia and the Aegean (Friedell, 2004) Research on the most ancient pre-history periods is yet at a crawling level; Anatolia's population is still a subject that must be researched and each of the civilizations that lived on those lands is a unique center of attraction and raises astonishment. With its architecture, family temples, expressions of art and the aesthetics in the pieces of furniture found, Catalhöyük comes foremost. But unfortunately Euro-Centralist theories push Asian and African societies outside of the world's historical development bed. This way, the European community becomes the one and only development bed and pioneer of humanity. On the other hand, eastern societies do not structurally possess development dynamics; they have been stuck due to their socio-economic structures. In conclusion, Western imperialism and colonialism, which will surpass this deadlock of the 'backward' Third World communities, have been accepted to be just (Bernal, Martin, 2003).

Keywords: Ancient Olympic Games, Antolia, Mesopotamia, Egytp, Civilization

# OP. 64 DETERMINATION OF THE SPORT MOTIVATIONS AND LIFE QUALITY OF THE PHYSICAL EDUCATION AND SPORTS COLLEGE STUDENTS

 $\underline{\mathsf{Damla}\;\mathsf{Ercan}}^1,$ İpek Aydın $^2,$ Özkan Tütüncü $^2$ 

#### Abstract

**Aim:** The impact of motivation and quality of life on success cannot be ignored. Success in sport may be related to motivation level and quality of life. The aim of the study, examined the relationship between motivation level and quality of life, and compared this relation to several variables. Taking by the opinions of the students about quality of life and motivation, motivation level, source of the motivation will be identified and factors like increasing of the students' participation in sport, enabling them to use their potential powers effectively, sustaining the sport participation and focusing to success will be associated with quality of life.

**Method:** The population of the study consisted of the students from Ege University School of Physical Education and Sports and Dokuz Eylul University School of Sport Sciences and Technology. In the field of the study, structured questionnaires were used. Questionnaire consisted of three parts; Sport Motivation (SM) Scale, Quality of Life (QoL) Scale and demographic variables. The

 $<sup>^{1}\</sup>mathrm{Ege}$  University School of Physical Education and Sport

<sup>&</sup>lt;sup>2</sup>Dokuz Eylül University School of Sport Sciences and Technology

questionnaire was carried out to the students by individual interview. In this context, the relationship between the quality of life and sport motivation of the students' (Ege University, n=142 and Dokuz Eylül University, n=79) opinions according to their gender, university and classes were examined. 221 students participated to the study. To analyze the data set SPSS 19.00 was used. Independent samples t-test, one-way ANOVA and correlation analysis were performed to the data set.

**Results:** According to results there is no significant difference about QoL and SM dimensions according to students' gender, university and classes (p>0,05). There is a significant and positive relation among the QoL and SM dimensions (p<0,05). There is only no significant relation between amotivation and external factors. And amotivation dimension has a negative and poor relationship among the other dimensions related with QoL and SM. According to these results, QoL and SM are two conditions that affect each other positively. As a result, if the quality of the life level increases, the sport motivation level also can be increase in the same way.

**Conclusion:** Through this study, the results, which quality of life and sport motivation subjects are associated with and affect each other, were obtained. In the study, there no significant differences were identified to the QoL and SM dimensions according to students' demographic variables. For the future studies, QoL and SM level and the effects will be analyzed according to branches.

Keywords: Sport, Motivation, Quality Of Life

# OP.69 'LADY' OR 'WOMAN'? MEDIA REFLECTIONS OF THE DEBATE REGARDING GENDER-SPECIFIC TURKISH WORDS

<u>Pınar Arpınar Avşar</u><sup>1</sup>, Serkan Girgin <sup>2</sup>, Nefise Bulgu <sup>1</sup>

- <sup>1</sup> Hacettepe University Sport Sciences Faculty
- <sup>2</sup> Free Researcher, Italy

#### **Abstract**

The study investigates linguistic sexism in communication in sports within a sociolinguistic context. The study is motivated by a recent debate on which of two near-synonymous Turkish words, i.e. 'kadın' or 'bayan' (the corresponding English words are 'woman' and 'lady'), is convenient to refer females in sports. Euphemistic reasons have been addressed as a reason behind the lexical choice in question and this preference has been associated with sexism in language. Therefore, we aim to focus at first on gender in Turkish language regarding linguistic sources enlighten multilayered meanings of the Turkish words. Then, we investigated the preference of near-synonymous Turkish words in the case of describing a female in sports by looking at the occurrence of the words in newspaper articles. Textual content in the written media were analyzed by i) investigation of recent trends in preference for words describing women in sports by a supportive text-mining study that covers 25,265 unique articles published in national newspapers in four consecutive years between 2008-2011, and by ii) investigation of change in historical timeline in preference for words describing women in sports by using the 50-year archive of a mainstream national newspaper. This study has revealed that even though 'bayan' is the most preferable Turkish word to refer to females since the 1970s, the occurrence of 'kadın' has progressively increased year by year, while the former revealed a decreasing trend. The possible motivations behind the lexical choice among the semantically near-synonymous words might be derived from euphemistic reasons, stylistic variations, collocations and fixed expressions or translational preferences.

\*The final, definitive version of this paper has been published online in International Review for the Sociology of Sport by SAGE Publications Ltd, All rights reserved. (DOI: 10.1177/1012690213519992)

Keywords: Gendered Language, Media, Sport, Women

# OP. 74 HEALTHY LIFESTYLE BEHAVIOURS, SOCIAL APPEREANCE ANXIETY AND CERTAIN FACTORS PREVENTING NON-WORKING WOMEN FROM PARTICIPATING TO THE PHYSICAL ACTIVITY

Zekai Pehlivan <sup>1</sup>, <u>Gizem Öztaş</u> <sup>1</sup>, Elif Nilay Ada <sup>1</sup>

#### **Abstract**

**Objective:** The main objective of this study is to analyse the healhty lifestyle behaviours, social appereance anxiety and the factors preventing non-working women from participating to pyhsical activity in terms of certain variables.

**Method:** 123 individuals residing in Mersin City Center have participated to this study. The average age of the participants is 38.39±10.6. 80.5% of the participants are married, 76.5% is with children, 26.3% is primary-secondary school graduate, 48.8% is high school graduate and 24.4% is university graduate. The data on the healthy lifestyle behaviours of the participants are collected by "Healthy Lifestyle Behaviours Scale II (HLBS)" including 6 sub-scales (health responsibility, physical activity, nutrition, self-expression, inter-personal relations and stres management), the data on social appereance anxiety of the participants are collected by one-dimensional "Social Appereance Anxiety Scale (SAAS)", and the factors preventing them from participating to physical activity is collected by a questionnaire form. All the data is provided from volunteer participants during home visits. For the analysis of the data, t and F tests are used and the magrin of error is 0.05.

**Findings:** 52.8% of the participants think that they are fit, 91.9% of them believe in the importance of physical activity and 81.3% of them express that physical activity is necessary for them. 53.7% of the participants state that there are certain factors preventing them from participating to physical activity and the main factor is "not having leisure time". In terns of marital status variable, single women receive higher points from HLBS "Stress Management" sub-scale than married women while in terms of the variable if there is a factor constantly preventing women from participating to physical activity, the ones marking "no" receive higher points from the sub-scales of Health Responsibility, Physical Activity and Nutrition (p<0.05). On the other hand, the ones marking "yes" receive significantly higher points from "Social Appereance Anxiety Scale" (p<0.05). In terms of the variable of the number of children, the ones with three or more children receive significantly higher points from the sub-scales of Health Responsibility and Social Anxiety Scale in comparison to the one with one or no children (p<0.05). In terms of education level variable, the high school graduates receive significantly higher points from Nutrition sub-scale than the elementary and secondary school graduates (p<0.05).

**Result:** Although non-working women believe that physical activity is necessary, they state that there is no leisure time to participate to physical activity. It is also concluded that in terms of healthy lifestyle behaviours, married women are less successful than single women in stress management, the ones marking "no" for physical activity are more successfull in the sub-scales of health responsibility, physical activity and nutrition, the ones marking "yes" in "Social Anxiety Scale" are more successful and the ones with more number of children have more health responsibility than the ones with less number of children.

Keywords: Key Words: Healthy Lifestyle, Social Appereance Anxiety, Physical Activity, Non-Working Women

<sup>&</sup>lt;sup>1</sup> Mersin University School of Physical Education and Sports

# OP. 122 THE EFFECTS OF 8 WEEKS YOGA EXERCISES ON FEMALE STUDENTS' BODY AWARENESS

Amir Moghaddam<sup>1</sup>, Amin Azimkhani <sup>2</sup>

#### **Abstract**

**Objectives:** The purpose of this study was to investigate the effects of 8 weeks yoga exercises on female students' body awareness.

**Methods:** In this semi-experimental type of study 40 university girls' students with age range of 18 to 26 years old were selected randomly as statistical sample. The Participants were divided in two groups experimental and control. The instrument used was Shields' Body Awareness Questionnaire (1989). The experimental group performed Yoga exercises for 8 weeks including 3 sessions in a week with 60-minute exercises duration for each session. Data was analyzed by using independent samples T-test. **Results:** The results of the study revealed a significant improvement in body awareness and its subscales except sleep and awakening cycle in experimental groups in comparison with control group after 8 weeks of yoga trainings. (p=0.001)

**Conclusions:** The effects of Yoga exercises on body awareness can be attributed to the positive effects of Yoga on body and mind. This result is driven from improved relationship between mind and body and extra attention that students paid to them because of the sport of yoga.

Keywords: Yoga, Body Awareness, Female Students

# OP. 124 THE RELATIONSHIP BETWEEN LEADERSHIP STYLE AND COMPETITIVE ANXIETY OF FEMALE ATHLETES

 $\underline{\text{Vahid Moghaddam}}^1$ , Amir Moghaddam  $^2$ , Amin Azimkhani  $^3$ 

#### Abstract

**Objectives:** The aim of this study was to investigate the relationship between leadership style of coaches and competitive anxiety of female athletes.

**Methods:** Subjects of the study were selected among players of three group sports of (basketball, volleyball, Futsal) and individual sports of (Judo, Taekwondo, karate) who are active in Super League and Champions League teams of the country in 2012 (n = 121). Data collected through questionnaires about competitive anxiety and leadership styles of coaches that assess five aspects of leadership styles: instruction and training, democratic, autocratic, social support and positive feedback. The questionnaires were used by athletes to identify perceptions of their leadership style and competitive anxiety.

**Results**: Results of Pearson Correlation Test showed that democratic style has a significant relationship with competitive anxiety and self-confidence of athletes in both group and individual sports. Also the democratic style has a significant relationship with competitive anxiety and self-confidence (P < 0/01). A significant and negative relationship has been seen between the style of instruction and training with physical anxiety of athletes in individual sports (P < 0/01).

**Conclusions**: These results suggest that in prioritizing of leadership style in both individual and group sports, coaches should use instruction and training style, positive feedback, social support, democratic and autocratic aspects of leadership respectively.

Keywords: Competitive Anxiety, Style Of Leadership, Individual and Group Sports

<sup>&</sup>lt;sup>1</sup> Mashhad Branch, Islamic Azad University Department of Physical Education and Sport Sciences

<sup>&</sup>lt;sup>2</sup> Imam Reza International University of Mashhad Physical Education and Sport Sciences

<sup>&</sup>lt;sup>1</sup> Qazvin Branch, Islamic Azad University Department of Physical Education and Sport Sciences

<sup>&</sup>lt;sup>2</sup> Mashhad Branch, Islamic Azad University Department of Physical Education and Sport Sciences

<sup>&</sup>lt;sup>3</sup> Imam Reza International University of Mashhad Physical Education and Sport Sciences

# OP. 152 THE METACOGNITIVE AWERENESS LEVELS OF THE SECONDARY SCHOOL STUDENTS WHO DO SPORTS WITH ALICENCE AND THE ONES WHO DON'T DO SPORTS

### Soner Tuzcuoğlu<sup>1</sup>, Gülsen Özcan <sup>2</sup>

- <sup>1</sup> Ministry of National Education Ankara Science High School
- <sup>2</sup> Abant İzzet Baysal University School of Physical Education and Sports

#### **Abstract**

### The purpose of the Research:

The purpose of this research is to determine the effects of sport on metacognition by identifying the differeces of metacognitive awareness levels between secondary- school students at the 6th, 7th and 8th grades who do sports in a licensed way and the ones who do not do any sport.

#### Research Group

This research has been carried out with students who have been doing sport in a licensed way minimal twice a week for at least two years and get educated at the 6th, 7th and 8th grades of secondary schools in Çankaya, Ankara in the spring term of 2012-2013 acdemic year. For his research, 246 students havecontributed, 87 of whom do team sports, 44 of whom do individual sports and 115 of whom are voluntary students from the 6th, 7th and 8th grades that do not do any sport.

#### **Analysis of Data**

SPSS pacleage software has been utilised to analyse the data collected throughout this research. Percentage and frequency values have been benefited from so as to analysis the personal information. During the analysis of the data referring the sub-problems of research, the test called Kolmogrow-Simirnow has been done in order to find out whether the groups have a normal distribution. At the end of the stastical analysis, it has been done in order to find out whether the groups have a normal distribution. At the end of the stastical analysis, it has been discovered that the students don't have a normal distribution in terms of their training time, while the data about the other variances have normal ditributions. A non-parametric test called Kruskal-Wallis H test has been used for the data about the training time without a normal distribution. A parametric test without a normal distribution. A parametric test called Independent samples t-test ,one- factor analysis of variance and two- factor analysis of variance have been used in order to analyse the data with a a normal distribution.

#### **Conclusion and Recemmendations**

Below are the results of this study, which has been conducted with the aim of researching whether there are significent differences between the metacognitive awareness levels of the secondary-school students who do sports in a licensed way and the ones who do not do sport:

- 1-There is a significant difference, in favour of the students who do team and/or individual sports in a licensed way, between the metacognitive awareness levels of the students from the 6th, 7th and 8th classes who do sport in a licensed way and the ones who do not do sport.
- 2-There is a significant differece as for the gender between the metacognitive awareness levels of the students who do team and/or individual sports in a licensed way and the ones who do not do sport.
- 3-There are no significant differences referring the weekly training hours in the metacognitive awareness levels of the students who do sport in a licensed way.
- 4-There are no significant differences related to the branch of sports they choose in the metacognitive awareness levels of the students who do sport in a licensed way.
- 5- There are no sognificant differences in the metacognitive awareness of the students with regard to the number of years for which they do sport in a licensed way.

The following recommendations could be given in accordance with the findings obtained from this study:

- 1-Training on the metacognitive awareness developing techniques of sports activities could be offered, particularly to the infrastructure trainers, during the coaching courses and seminars which are conducted by the Sports Education Department and the Sports Federations.
- 2- The trainars educated on the development of the metacognitive awareness could be employed in primary and secondary schools, and thus much more children could be encouraget to participate in sports activities.

- 3- Free sports schools could be opened in towns and cities via the provincial directorates of the Youth and Sports Ministry.
- 4- Physical education and sports activities lessons could be included into the primary schools' curriculums as the metacognitive awareness begins to develop at the age of four.
- 5- School administrations, teachers, students and their parents could be well informed about the impact of sports activities on the development of metacognitive awareness, and the scheduling of sports activities systematically could be encouraget at schools.
- 6- School administrations and physical education teachers could encourage students to do sport in a licensed way.
- 7- This study could be conducted for larger groups or the groups with different features.

Keywords: Secondary School, Sport, Metacognitive Awareness, Team Sport, Individual Sport.

# OP. 156 ASPECTS / DIRECTION OF INTIMIDATION BEHAVIOURS THAT THE FOOTBALL REFEREES ARE EXPOSED TO

Serkan Hacıcaferoğlu<sup>1</sup>, Cemal Gündoğdu<sup>2</sup>, Burhanettin Hacıcaferoğlu<sup>3</sup>

- <sup>1</sup> Recep Tayyip Erdoğan University Faculty of Education Physical Education and Sports
- <sup>2</sup> Firat University School of Physical Education and Sports
- <sup>3</sup> Ministry of Youth and Sport City Youth and Sport Directorate

#### **Abstract**

The concept of intimidation in Turkey recently emerges as a situation frequently encountered in the visual and print media, and in the academic environment. Intimidation is seen as hostile and unethical behaviors applied systematically in long-term period against a person's self-esteem and selfconfidence by one or a few employees against an employee who threatens someone due to her/his knowledge and success. Mobbing behavior is a process. In this process, the cases which affect most any person are the frequency repetition and duration of the intimidation. As much as the intimidation increases and its duration prolongs as well, its effect also increases. The thresholds tolerances of the individuals to resist the intimidation are different from one another. While for some individuals it is normal and tolerable, it can become quite unbearable for some individuals. "The end awaiting an individual who cannot overcome the mobbing behaviors usually is the loss or death of the sense of self". The purpose of this study is to identify aspects of the mobbing behaviors that football referees within Turkey Football Federation are exposed to at their working environment. Sample of the study, conducted by using screening model, consisted of 374 referees. Survey data were collected by "Mobbing Scale For Football Referees". Frequency, percent, arithmetic mean, Tukey and one-way variance analysis were utilized in the study. Consequently, it is determined that 49.2% of the referees were exposed to mobbing behaviors at a lower medium level during the last six months. It is also established that referees perceived medium-level mobbing from the sports environment. On the other hand, it is revealed that they perceived mobbing at medium-level from the fans in the sports environment, the footballers, club executives and the media, and at a lower medium level from the coaches, at a low level from the management (MIC). It was determined that they perceived intimidation at a lower medium level from their friend referees in their social environment. Statistically significant difference was found between the sports and social environment and the mobbing behaviors according to the variables of education and tenure of the referees. In this context, we cannot say that the current situation in 'the law of violence in sports' is sufficient in preventing the psychological mobbing behaviors against the referees coming from the sports and the social environment. Also, the Central Referees Committee which is in a managing position of the referees must carry out studies in order to adapt the current law related to the mobbing behaviors to the sports in order to prevent such behaviors and the necessary rules must be re-set up and their functionality must be increased as well.

 $Keywords:\ Mobbing,\ Psychological\ Intimidation,\ Referees,\ Football\ Referees$ 

# OP. 158 INVESTIGATION OF CHANGES IN OFFICIAL GAME RULES OF VOLLEYBALL USING THE METHOD OF DOCUMENT ANALYSIS

Eren Uluöz<sup>1</sup>, İsmail Kalleci <sup>1</sup>, Dilek Sevimli <sup>1</sup>

#### **Abstract**

**Aim:** Volleyball is a sport branch which is being participating by millions of people around the world in recreational, amateur and professional purposes. The changes which made in the official game rules of the sport of volleyball affect the structure and participants directly. The purpose of this study is to determine the main changes in the official game rules in recent years.

**Methods:** The document analysis method which is one of the qualitative research methods and based on examining existing records and documents and collecting data was used in this study. "Official Volleyball Rules" books which is being issued periodically by the FIVB (World Volleyball Federation) is used as the main source of research. In the study, changes in the basic rules is identified according to the subjects by examining these official rules books and managed to determine that changes focused in which subjects in the light of the findings.

Results: : When the changes in the official Volleyball game rules examined, this has been observed the changes aimed at making improvements in some of the main issues. These changes can be classifies as changes for improving the fluidity of the game, for the improvement of the pleasure cruise, for the protection of athletes' health and changes for easing TV broadcasts. The changes as "Switching system from service pass system to errors/number (rally point) system" (Tokyo, 1998), "Using of Libero player" (Tokyo, 1998), "Using every point of body at ball touch" (Athens 1994), "Pasing to foreign competitors area below the net", "touching other areas of the net at outside of upper band outside", "the tolerance for the fault at first ball meeting" (Athens, 1994) "expansion of service area" (Athens, 1994)," improvements made in the used materials and ground" is seen as fundamental rule changes to improve the game's fluidity. The main changes which is made to protect athletes' health, are thought to be changes such as installation protective barrier to the poles, to dry wet ground soon (FIVB, 1994), to give technical break, to pass to the rally point system (Tokyo, 1998), to use knee pads protective materials, lighting and ambient temperature standardization etc... Volleyball is one of a small number team sports which is finishing time of competition is not clear. In prior periods, broadcasters were seem as they were reluctant to broadcast competitions because of that some long competitions could may hinder their broadcast stream. With transition to Rally point system, times of competitions which were lasting 3-4 hour decreased to more predictable and occur periods and hitches which makes broadcasters reluctant about broadcast the competition, were largely prevented.

Conclusions: Volleyball is becoming to be a popular sport which its audience and participants are increasing and becoming pleasurable to watch day by day with the rule changes. At the same time, there has been an increase in TV broadcasting. With these positive developments, athletes and coaches are suggesting some issues can be subjected in further studies as some changes as the "flexibility at contact(net) and passing to the opponents" could increase the game's fluency but as well as cause some sports injuries.

Keywords: Volleyball, Official Game Rules, Rule Changes

<sup>&</sup>lt;sup>1</sup> Cukurova University School of Physical Education and Sports

# OP. 159 DOES THE SEX COMPOSITION OF EXERCISE SETTING AFFECT PSYCHOLOGICAL CHARACTERISTICS OF FEMALE EXERCISE PARTICIPANTS?

Safter Elmas<sup>1</sup>, Aydan Gözmen <sup>1</sup>, Cengiz Karagözoğlu <sup>1</sup>, F. Hülya Aşçı <sup>1</sup>

#### **Abstract**

The purpose of this study was to examine psychological characteristics of female exercise participants in terms of sex composition of exercise setting. In this study, exercise setting was categorized into two - exercise settings in which only female exercise (non-coed) and exercise setting in which both females and males exercise together (coed). 124 female ( $M_{age}$ =26.54, Sd=5.96) from non-coed and 114 female ( $M_{age}$ =25.94; Sd=5.46) from coed exercise settings voluntarily participated in this study. Social Physique Anxiety Scale (SPAS), Basic Psychological Needs in Exercise Scale (BPNES) and Dispositional Flow Scale-2 (DFS-2) were administered to the participants. Independent sample t-test was conducted to test differences in social physique anxiety and dispositional flow states with regard to exercise setting. MANOVA was also conducted to test differences in basic psychological needs. Independent sample t-test results revealed no significant differences in social physique anxiety level [ $t_{(232)}$ = 0.82; p>0.05] and dispositional flow states [ $t_{(184)}$ = 1.66; p>0.05] with regard to sex composition of exercise setting. MANOVA results also indicated no significant differences in basic psychological needs with regards to sex composition of exercise setting (Hotelling's  $T^2$ = 0.04;  $F_{(2,562)}$ = 3.00; p>0.05). In conclusion, sex composition of exercise setting has no effect on the psychological characteristics of female exercise participants.

Keywords: Exercise Settings, Woman, Psychological Characteristics

# OP. 189 INVESTIGATION ABOUT THE EFFECTS OF SPORTS TRAINER CHANGING AT HALF-SEASON ONTO FOOTBALLERS': A QUALITATIVE RESEARCH

Pınar Güzel <sup>1</sup>, Zeynep Onağ<sup>1</sup>, Fethiye Barutçu <sup>1</sup>

#### **Abstract**

#### **Purpose:**

When researchers do studies about the trainer changing in Turkey, they can clearly see that this situation is a question which has been repeated rather frequently. It is seen that the football clubs which don't appropriate the professionalization, which are not sufficiently qualified to become institutional ones consider non-ethic ways or non-gentlemanly ways. At the same time, the managers of the football teams prefer trainer changing because of a failure or a problem inside the club, on the basis of the trainers' management or administrating abilities or not being educated at the football teams, firstly. The aim is to prove positive or negative effects of trainer changing on the footballers at half-season which has been seen a way to avoid the lack of success in Turkey by considering the sports trainer changing at half-season.

#### **Method:**

In this study, case study method was used in qualitative research techniques. And 'easy to acess for exampling method' was used while the selection is being preferred. According to the amicableness of the aiming, exampling of the investigation is constituted from the 75 professional footballers who are playing at least one season in five different clubs in İzmir city, accept to join to the investigation willingly and whose ages are changeable between from 17 to 34. In this investigation 'conversation' approaches and 'half-constructed conversation forms' were used as data collecting method. The conservation form which was used in the investigation is occurred from two parts, one of them is footballers' personal information, and the other one is the questions about subject of the investigation.

<sup>&</sup>lt;sup>1</sup> Marmara University School of Physical Education and Sports

<sup>&</sup>lt;sup>1</sup> Celal Bayar University School of Physical Education and Sports

Personal information form and conversation questions were produced by consulting with experts and specialists about. Required permissions have been provided to make conversations with the professional footballers, from the managers of the teams of professional footballers' to gain information of investigation. After that, researchers wanted to converse with the footballers when they were convenient by meeting with the coaches. Researchers made footballers to sign a permission paper which includes some matter that the investigation is permitted by footballers themselves and there is no matter to record them, by giving information to the footballers about the investigation.

#### The Findings

When they scrutinize the profiles of the 75 joiners, it is fixed that %57 of the footballers who are between 17 and 34 ages graduated from high school and %42,6 have seen coach changing between 6 and 10 throughout their life. In the end of the investigation about the coach changing's effects, diagnosis are gathered under two main themes. These are psychological effects and performance effects. When this main theme was classified by lower dimensions, it separated three parts which are positive, negative and neutral. It is fixed that the joiners who say the coach changing affects onto the team positively are %53, and the other ones who say that this changing affects onto the team negatively are %15. Besides, %32 of the footballers clarify that they are not affected positively or negatively.

#### **Results**

In the end of the investigation, according to footballers' opinions, the coach changing at half-season affects the team positively when the team goes down and their performing ways poor in quality. Yet, it takes place in the investigation that the coach changing at half-season sometimes affects onto footballers negatively.

Keywords: Trainer, Footballer, Physical Performance, Psychological Performance

# OP. 191 INVESTIGATION OF COACH BEHAVIOURS AND ATHLETES' EXPERIENCES IN TWO DIFFERENT YOUTH BASKETBALL CONTEXT

Ahmet Yapar<sup>1</sup>, Mustafa Levent İnce <sup>1</sup>

<sup>1</sup> Orta Doğu Technical University Faculty of Education Department of Physical Education and Sports

#### **Abstract**

**Purpose:** Numerous model have been developed to understanding, describing and developing sports participation in all level and ages. Developmental Model of Sport Participation (DMSP) is a popular and widely used model that provides a framework to understand sport participation contexts and its' characteristics (Cote & Fraser-Thomas, 2007). According to DMSP, children and youth participate in extra-curricular organized sports for recreation or competitive performance. Sport setting for enjoyment and health refers to recreational trajectory and sport setting for competitive performance refers to elite performance trajectory. In Turkish youth basketball setting, early years of recreational trajectories corresponds to basketball schools and early years of elite performance trajectories (specialization years) corresponds to the youth basketball teams (TBF, 2013). The purpose of the study is explore coaching behaviours existing in young adolescent's recreational and specialization basketball context, training contents and investigate the differences between young adolescent basketball players' youth experiences that gained from sport participation, enjoyment and burnout levels.

**Method:** 3 basketball school coaches and (age=34.0± 2.7 years old, coaching experience= 8.2± 3.1 year) 3 youth basketball team coaches (age=32.3±3.2 years old, coaching experience= 8.4± 3.3 year) totally 6 male coaches were participated to the study. Each coach was video typed four times during their training and totally 24 training were analysed systematically with the Arizona State University Observation Instrument (ASUOI, Lacy, & Darst, 1989). The deliberate play and deliberate practice activities in the trainings were also coded and classified. Moreover, 133 basketball school participants (age=12.7±0.7 years old, experience= 2.1±0.7 year) and 143 youth basketball team players (age=13.1±0.7 years old, experience= 2.1±0.7 year) filled out the Youth Experience Survey for Sport

(YES-S, MacDonald, Côté, Eys, & Deakin, 2012), Sources of Enjoyment in Youth Sport Questionnaire (SEYSQ, Wiersma, 2001) and Athlete Burnout Questionnaire (ABQ, Raedeke & Smith, 2001).

**Findings:** The findings of the ASUOI indicated that basketball school coaches' behaviour composed of 31% instructional and 69% non-instructional behaviour meanwhile youth basketball team coaches behaviour composed of 48% instructional and 52% non-instructional behaviour. To compare the coach behaviours in two context Mann Whitney U test was used. The results indicated that only "post instruction", "physical assistance" and "positive modelling" subscales of instructional behaviours and only "management", "silence" and "Uncodable" behaviours subscales of non-instructional behaviours were found statistically different (p<0.05). While basketball schools training content composed of 19% deliberate play and 81% deliberate practice, youth basketball team training content composed of 15% deliberate play and 85% deliberate practice activities. One way ANOVA statistics were applied to compare the basketball school and youth team players' YES-S, SEYSQ and ABQ scores. The results indicated that there is no significant differences between basketball school and youth basketball team players youth experiences, enjoyment and burnout levels [YES-S, F(1, 274) = .00, p = 0.966; for SEYSQ F(1, 274) = .00, p = 0.989; for ABQ F(1, 274) = .20, p = 0.888] (p>0.05)].

Conclusion: Systematic observation results of basketball school and youth team coaches indicated that although there is some significant differences between sub-coach behaviours, the general behaviour path was very similar to each other. The behaviour path indicated that basketball schools coaches' behaves like youth team coaches. DMSP recommend that while in the early years of recreational trajectory include high amount of deliberate play and low amount of deliberate practice, in the early year of elite performance balanced deliberate practice and play ratios. The analysis of the training contents prove that basketball school and youth team trainings include more deliberate practices that is not suitable for each context. As a conclusion, to purpose of changing and developing coaching behaviour and improve their planning of content skills, coach development programs may be prepared and applied according with the purpose of the coaching context

Keywords: Coaching Behaviour, Deliberate Play/practice, Athlete Experiences

# OP. 196 VALIDITY AND RELIABILITY STUDY THE SCALE OF PARTICIPATION IN EXTREME SPORT

#### Kerem Yıldırım Simsek<sup>1</sup>

#### **Abstract**

Objective: The aim of this study is to prove the validity and reliability the scale of participation in extrem sport.

Methods: For this ocjective, the examination of relevant literature and research in the context of the focus group discussion resulting in extrem sport participation motivation sizes was included and reliability and validity of the scale was made. The scale was performed in certain provinces of Turkey benefiting from extreme sport facilities and convenience sampling method selected individuals.

Findings: Content validity of the scale (expert opinion), convergent validity (the lowest factor of loading value is 0,515 highest factor is 0,892), decomposition/external validity (all factors in the positive direction in the mid and high level relationship) and constuct validity (5 factor and 24 item) tests were performed. Internal coefficient of consistence with Cronbach Alpha (0,957) analysis was used for reliability of the scale.

Results: As a result of the analysis is valid and reliable instrument was reached, thus achieving the objective of the research has concluded that.

Keywords: Extrem Sport, Sport Participation, Validity and Reliability

<sup>&</sup>lt;sup>1</sup> Anadolu University Faculty of Sport Sciences

#### OP. 236 GENDERED SPACE; RECREATION AND WOMEN

### Feyza Meryem Kara<sup>1</sup>

<sup>1</sup> Başkent University Faculty of Health Sciences Department of Sport Sciences

#### **Abstract**

### **Purpose**

The aim of this study is to examine the perspective of the female participants the basis of recreational activities "gendered space" and the term of security where the different classes, identity and groups live together, social and economic life of the characteristics shaped by the cities.

#### Method

The study was carried out with qualitative research methods, in accordance with the phenomenology design. Seventeen female, which are selected through Stratified Random Sampling Method among the recreational participants living in Ankara which reside in the districts where represent the different socio-economic levels, had been included in the study. As for the data of the study, it was collected via semi-structured interviews. The participants of this study are determined by using maximum variation sampling, one of the purposive sampling methods. The data collection tool of the study is the Semi Structured Interview Form. Purpose to increase the internal validity of the study, related literature and a conceptual framework has been established when developing Semi Structured Interview Form. A 328 minute interview was had within the scope of the research; the tape recordings were computerized through the Microsoft Word processing program as raw data without being subjected to any screening. Each transcript in the research were analyzed by using line by line analysis approach. In the interpretation process of the interview data, the methods of inductive descriptive analysis, content analysis and constant comparison are used.

### **Findings**

As the result of the data analysis, six main themes are emerged such as: "gender-based segregation" "time of using sport facilities", "political structure", "gender- based audit", "cultural structure" and "misleading aperture-the transparency" theme opinions about the specified headings have been created.

#### Result

According to findings, major limiting the use of recreational spaces, violence that could allow to men who have been found to be avoiding in recreational area, have been identified for female participants. In addition, the "discourses" of power and organizations is the comparison with other results of the research. Consequently, recreational areas belong to the men's world, places that are perceived as participants "hegemonizm", important risk factor which limits the use within maintain strength as participants freely, the power which controlled the "gendered space" cases bear was determined that "modern city" phenomenon in contrast.

Keywords: Gendered Space, Recreation, Security, Women

# OP. 244 THE EFFECT OF REGULAR PHYSICAL EXERCISE ON LIFE SATISFACTION AND HOPES OF THE BREAST CANCER WOMEN IN REMISSION

Faik Ardahan  $^1$ , Seda Genç  $^1$  , <u>Asiye Hande Uludağ</u>  $^1$ 

#### Abstract

The purpose of this study was to identify the effect of regular physical exercise on life satisfaction and hope of the breast cancer women in remission. This was a descriptive study and sampling group consists of randomly selected 15 females volunteer participants who follow 16 weeks physical exercise program and who complete the medical cure in Akdeniz University Medicine Faculty, Oncology Department. The data collected by a questionnaire form, which has demographics questions, Life Satisfaction (LS) Scale developed by Diener et al. (1985) and Hope Scale developed by Snyder et al. (1991), before and after exercise program. In the process of assessing data, Wilcoxon test were

<sup>&</sup>lt;sup>1</sup> Akdeniz University School of Physical Education and Sports

performed to examine the differences between before and after exercise program. Results have been assessed according to significant level 0.05.

As a result of this study, it was found that regular physical exercise program made statistically positive differences on life satisfaction and hopes of the breast cancer women's in Remission. Regular physical exercise can be recommend as an adjutant cure for the breast cancer women in remission period to effect positively their life satisfaction, hopes, physical, mental and emotional symptoms of breast cancer.

Keywords: Breast Cancer, Life Satisfaction, Hope, Physical Exercise, Recreation

# OP. 246 LIFE SATISFACTION AND PEER ATTACHMENT AMONG PHYSICAL EDUCATION AND SPORT SCHOOL STUDENTS

Necati Gürses <sup>1</sup>, <u>Sonnur Küçük Kılıç</u> <sup>1</sup>, H.mehmet Tunçkol <sup>1</sup>, Erman Öncü <sup>1</sup>

#### **Abstract**

#### **Objective**

The purpose of this study was to examine physical education and sport school students' perceptions life satisfaction and peer attachment according to some demographic variables, and to determine the relationship between life satisfaction and peer attachment perception.

#### Methods

The study was based on a descriptive research model and conducted on 288 PE students (88 female and 200 male) who were enrolled in the Karadeniz Technical University in 2013-2014 Spring Semester and whose ages ranged between 18 and 32 (MAge=21.93). In the study, The Life Satisfaction Scale (LSS) and the Peer Attachment Scale (PAS) were administered on the participants as data collection tools. The LSS was developed by Diener et al (1985) in order to measure the life satisfaction level of people. The Turkish adaptation of the LSS was developed by Yetim (1993). The scale was consisted of 5 items and all items were measured by using a seven-point Likert scale. Cronbach Alpha reliability coefficient was determined as 0.82 for this study. The PAS was developed by Armsden ve Greenberg (1987) in order to determine the peer attachment perception levels of adolescents with their friends. The Turkish adaptation of the PAS was developed by Hortaçsu and Oral (1991). The scale was consisted of 25 items and all items were measured by using a five-point Likert scale. Cronbach Alpha reliability coefficient was determined as 0.91 for this study. Descriptive statistics was performed on all variables. t test, ANOVA and regression analysis were used in the data analysis. Cronbach's alphas were calculated for the scales in order to evaluate their internal consistencies.

#### Results

The mean of the LSS and the PAS scores of the classroom teachers who participated in this study was 4.68 and 3.90, respectively. In respect to gender variable, the participants' LSS scores did not differ significantly (t=1.23, p=0.22), but there was significant difference in the scores of their peer attachment perceptions (t=2.61, p=0.01). According to this result, the female students' average scores (4.03) were higher than the male students' scores (3.85). There was no significant difference in the scores of the participants' life satisfaction (F=1.37, p=0.25) and peer attachment perception (F=1.56, p=0.20) in respect to class level. There was significant difference in the scores of the participants' LSS (t=2.41, p=0.02). The average scores of the participants whose income over 1001 TL (4.89) were higher than the scores of the participants whose income was below 1000 TL (4.54). There was no significant difference in the scores of the participants' PAS (t=0.76, p=0.45) according to income level. The students' LSS (F=1.01, p=0.37) and PAS (F=0.63, p=0.53) scores did not differ significantly in respect to income level variable. According to the regression analysis, 7% of the variance in life satisfaction was predicted from the peer attachment perception of the participants.

#### Conclusion

The participants' life satisfaction levels were at the middle level and the participants' peer attachment

<sup>&</sup>lt;sup>1</sup> Karadeniz Technical University Department of Physical Education and Sports

levels were above the middle level. The students' life satisfaction levels did not differ according to gender variable. The female students had higher peer attachment perception scores. The students' life satisfaction and peer attachment perception did not differ in according to class level. The participants who had higher income had higher life satisfaction. But the students' peer attachment perceptions did not differ according to income level. Additionally, our findings demonstrated that the students' peer attachment perceptions have important effects on determining their life satisfaction levels. This study had its limitations in terms the characteristics of its sample. The sample of this study was selected from only one university. In order to overcome these limitations, it is suggested that the future studies include different samples.

Keywords: Physical Education And Sport School Students, Life Satisfaction, Peer Attachment

# OP. 264 TO EXAMINE GENDER DIFFERENCES IN PERSONAL AND SOCIAL RESPONSIBILITY OF SECONDARY SCHOOL STUDENTS

Bülent Ağbuğa<sup>1</sup>, Şehmus Aslan<sup>1</sup>, Fatma Ağbuğa<sup>1</sup>

#### **Abstract**

Although personal and social responsible behaviors at school are important skills to establish a consonant education setting for effective teaching and learning, these kinds of behaviors have been rarely examined in the context of physical education settings. Therefore, the purpose of this study is to examine gender differences in personal and social responsibility of secondary school students in physical education settings. Participants consisted of 221 high school students (116 boys and 105 girls, M age = 16.04, SD = 1.39) attending two public schools in the west of Turkey. They completed questionnaire assessing their personal and social responsibility (PSRQ) developed by Li et al (2008) and adapted to Turkish by Agbuga (2013). The format for all items is a 6-point Likert-type scale, ranging from 1 (strongly disagree) through 6 (strongly agree). For statistical analysis, first, descriptive statistics were conducted to provide an overall outlook of students' personal and social responsibility perspectives in physical education. Then, the Pearson product-moment coefficients of correlation were computed to determine relationship between both genders' personal and social responsibility behaviors. Finally, independent sample t-test was conducted to examine if there is a gender difference in these kinds of behaviors. Both male and female students reported higher scores on personal and social responsibility behaviors (Xmale = 5, 09; ss = ,96 and Xfemale = 5, 26; ss = ,69 for personal responsility; Xmale = 4, 83; sd = ,95 and Xfemale = 5, 13; sd = ,57 for social responsibility). The correlation analysis suggests that, both male and female students, personal responsibility behaviors are positively related to social responsibility behaviors. The results of independent sample t-test shows the existence of gender difference in variables under consideration with female students showing higher levels of social responsibility (p < .01). The findings revealed that teachers should take into account students' gender differences if they want to promote positive personal and social responsibility among their students. Future research should also try to capture the responsibility behaviors using longitudinal analysis, structured interviews, observation, and videotaping survey.

Keywords: Gender, Physical Education, Responsibility, Students

<sup>&</sup>lt;sup>1</sup> Pamukkale University School of Sport Sciences and Technology

# OP. 272 THE RELATIONSHIP BETWEEN KICK BOXERS PERCEPTION OF COACHING BEHAVIOURS AND ATHLETES ACHIEVEMENT MOTIVATION

İhsan Sarı <sup>1</sup>, Gamze Deryahanoğlu <sup>1</sup>, Betül Bayazıt <sup>2</sup>, <u>Rıdvan Kır</u> <sup>3</sup>

#### **Abstract**

Sports coaches always interact with their athletes in trainings, competitions and other times during the day. Therefore, sports coaches' behaviours could affect athletes' behaviours and performances. When relevant literature is examined, it is seen that coaching behaviour has been a topic of sports psychology research in the last years. Considering the fact that individual and environmental factors could affect the relationship between sports coaches and athletes, necessity for examining coaching behaviours in different samples appears to be important. Therefore, the aim of this research is examining the relationship between kick boxers' perception of coaching behaviours and athletes' achievement motivation.

For this purpose, 229 male (%65.1) and 123 female athletes (%34.9) as a total of 352 athletes ( $X_{age}$ :  $18.03\pm2.54$ ) voluntarily participated to the research. As data collection tools, "Leadership Scale for Sports" and "Achievement Motivation Scale" were used. The data was analysed by SPSS 17 Package Program and level of significance was determined to be 0.05.

Before conducting the hierarchical regression analysis, normality was checked. Skewness and kurtosis values were also evaluated. Outliers and Mahalanobis values were checked and 14 observations were excluded according to this evaluation. Correlation, VIF and tolerance values were examined to control for multicolinearity. As a result, it was concluded that the data is suitable for regression analysis.

When age, gender, education and training hours are determined as control variables, coaching behaviours explained %18 of power motive, it was seen that;  $R^2$  change=.18, F change (5.342)=15.649, p<0.05. Training and instruction behaviour and autocratic behaviour contributed to this model. In another regression analysis with the same control variables, perceived coaching behaviours explained %26 variance in motive to approach success. It was seen that;  $R^2$  change=.26, F change (5.342)=25.415, p<0.050. Training and instruction behaviour and autocratic behaviour contributed to this model. In another regression analysis to determine which coaching behaviour contributes to motive to avoid failure, it was seen that perceived coaching behaviour explained %10 variance. It was seen that  $R^2$  change=.10, F change (5.342)=8.172, p<0.05. Autocratic behaviour significantly contributes to this model. Considering the  $\beta$  values in regression analysis, it can be said that training and instruction behaviour positively and significantly contributes to power motive and motive to approach success while autocratic behaviour negatively affects these two dimensions. According to the result, it could also be said that perceived autocratic behaviour could increase motive to avoid failure. Considering the result overall, training and instruction behaviour appear to be more positive while autocratic behaviour seems relatively to be negative.

Keywords: Leadership, Sports Coach, Achievement Motivation, Kick Box

<sup>&</sup>lt;sup>1</sup> Sakarya University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Kocaeli University School of Physical Education and Sports

<sup>&</sup>lt;sup>3</sup> Bartin University School of Physical Education and Sports

# OP. 278 PERCEIVED TEACHER FEEDBACK SCALE: THE VALIDITY AND RELIABILITY STUDY

Feyza Meryem Kara<sup>1</sup>, F. Zişan Çetinkalp<sup>2</sup>, F. Hülya Aşçı<sup>3</sup>

- <sup>1</sup> Başkent University Faculty of Health Sciences Department of Sport Sciences
- <sup>2</sup> Ege University School of Physical Education and Sports
- <sup>3</sup> Marmara University School of Physical Education and Sports

#### **Abstract**

#### **Objective**

The current theoretical approaches used to investigate students' motivational processes include self-determination theory (Deci & Ryan, 1985, 1991; Frederick & Ryan, 1995; Ryan & Deci, 2000) and Vallerand's (1997) hierarchical model of intrinsic and extrinsic motivation. Moreover, teacher feedback has been the focus of much research (Behets, 1997; Koka and Hein, 2003: 2006; Amorose & Horn, 2000; Hagger, Chatzisarantis, Culverhouse, & Biddle, 2003; Koka & Hein, 2003; Standage, Duda, & Ntoumanis, 2003a, 2003b; Wilson & Rodgers, 2004). In addition, Koka and Hein (2003) developed the Perceptions of Teacher's Feedback (PTF) questionnaire to investigate the relationships between perceived teacher's feedback and intrinsic motivation and its components in middle school physical education (PE). Perceptions of teacher's feedback may have important implications for teachers related to maximizing student motivation in PE. Even though there is no scale was developed in Turkey yet. In order that, the aim of this study was to examine the validity and reliability of Turkish version of the Perceived Teacher Feedback Scale which has been developed by Koka and Hein (2003).

#### Method

Scale was completed by 454 students who are 221 girls  $(12.67 \pm 1.25)$  and 233 boys  $(12.79 \pm 1.27)$  with a mean of age  $12.83 \pm 1.26$  years. The Perceived Teacher Feedback Scale consists of 14 items assigned to 4 subscales (Positive nonverbal feedback-PNVF, Positive general feedback-PGF, Negative nonverbal feedback-NNVF, Knowledge of performance-KP). Construct validity was evaluated by confirmatory factor analysis (CFA). The Internal consistency of the scale was determined with Cronbach alpha.

#### **Results**

Findings regarding the construct validity of the scale were rather consistent with the original scale's four-factor structure [SB-c<sup>2</sup> (df = 66) = 185.70,  $\chi^2$  / df = 2.81, RMSEA = 0.061, SRMR = 0068, TLI = .91, CFI = .93, GFI = 0.92]. Internal consistency coefficients were ranged between 0.69 and 0.83

#### Conclusion

The psychometric properties of the Turkish version of Perceived Teacher Feedback Scale showed that the instrument is a valuable additional tool for the assessment of perceived teacher feedback in Turkey.

Keywords: Teacher, Feedback, Validity, Reliability

# OP. 342 SPORTS AS A TOOL OF DIPLOMACY: THE EXAMPLE OF NAIM SÜLEYMANOĞLU

### Edip Öncü<sup>1</sup>

#### Abstract

**Objective**: One of the most striking trademark features of the 20<sup>th</sup> century has been the emergence of sports as a considerable tool in the foreign policy actions and considerations of the nations. Especially after the crystallization of the two blocs during the Cold War, sports, and Olympics in particular, became one of the most important propaganda tools of the nations. Such a diplomatic weapon began to be utilized by Turkey in its full extent towards the end of the 1980s when the Cold War had already

<sup>&</sup>lt;sup>1</sup> Karadeniz Technical University Institute of Social Sciences

entered its final stages. In this period, the ANAP (Motherland Party) administration was following a US led foreign policy shaped by the Reagan Doctrine in a manner that occasionally went beyond the traditional diplomatic ways. In this context, one of the boldest diplomatic initiatives that could be regarded as a diplomatic victory for Turkish foreign policy was the most celebrated asylum of Naim Süleymanoğlu, a world-famous weightlifting champion of Bulgaria with Turkish ethnic origins. This study aims to investigate the effects of foreign policy on the sports, Olympics and public opinion in the late 1980s in Turkey by focusing on Naim Süleymanoğlu's example. The real intent is to demonstrate that sports and especially Olympic victories can be utilized as serious political tools.

Method: A thorough survey of the media in addition to the minutes of the Turkish National Assembly and the publications of the Turkish National Olympic Committee formed the core sources of this study. The historical analysis of the topic was shaped according to basic assessments of the literature in regards to foreign policy dynamics. Accordingly, the method chosen was the reinterpretation of a relatively short period in history (1983-1989) from the perspective of diplomatic history. In the course of interpretation, a healthy analysis of the topic was freed from popular approaches as much as possible. The time frame was limited with Naim's emergence in the world weightlifting scene in 1983 up to 1988 Seoul Olympics where the celebrated athlete reached the zenith of the Olympic heights.

Results and Conclusion: Naim Süleymanoğlu was one of the most prominent Olympic athletes of the 20<sup>th</sup> century who was selected as the weightlifter of the year six times by the International Weightlifting Federation (IWF) between 1984 and 1996 and who was the first weightlifter to win three successive Olympic gold medals (1988, 1992 and 1996) by breaking 46 records throughout his whole career (IWF, 2014). At the Seoul Olympics in 1988 he lifted 152.5 kgs in snatch and 190 kgs in clean and jerk, reaching to 342.5 kgs in total in the featherweight category (Olympic Movement, 2014; İstanbulluoğlu, 2008). The weights the "Pocket Hercules" lifted equally installed Turkey's weight in the international arena by the immense interest of the sponsors and media to the champion. Naim was eventually added to the IWF Hall of Fame in 2004 (IWF, 2014). Escalating in mid-1980s, the ethnic and religious pressure and persecution in Bulgaria targeted Turkic population. Bulgarian policies deeply disturbed Naim and his family. Thinking of defection for a long time, the weightlifter sought asylum in the Turkish Consulate in Melbourne, Australia right after an unofficial tournament on December 7<sup>th</sup>, 1986. After an intercontinental journey involving a stop at the Turkish Embassy in London, UK, Naim was rushed to a publicized press meeting in Ankara by the Turkish PM (Atabeyoğlu, 2003). This was considered a frontier victory on the Cold War by Turkey who was appreciated by its allies for this diplomatic overture. Following a crowded celebration in Istanbul, Naim was officially made a Turkish citizen on December 15<sup>th</sup>, 1986. After Naim's asylum Bulgarian atrocities were much publicized in the international arena. This led the two countries to reach on a protocol in February 1988 (Kemaloğlu, 2012). The naturalization of Naim opened the way for the Bulgarian Turks who sought to emigrate. The example of Naim also revealed the deep discontent in the Communist regimes leading to mass defections. Right before the Seoul Olympics, the Turkish PM paid Bulgaria over one million dollars to allow the weightlifter to compete in the games. Many other Bulgarian Turks defected to Turkey and brought fresh blood to the Turkish sports. In 1989 Bulgaria forced 300.000 Turks to immigrate to Turkey (Kemaloğlu, 2012). Naim's defection was only the harbinger of this mass exodus which was accelerated by Turkey's Reagan Doctrine led foreign policy (Erdoğan vd., 2013). In conclusion, sports was used effectively as a diplomatic tool by Turkey in the famous Naim saga.

Keywords: Naim Suleymanoglu, Olympics, Foreign Policy

# OP. 373 THE EFFECTS OF 10 WEEKS OF IMAGERY AND CONCENTRATION EXERCISES ON VISUAL FOCUS IN BASKETBALL PLAYERS

Ferudun Dorak <sup>1</sup>, Nilgün Vurgun <sup>2</sup>, <u>S.Sevil Uludağ</u> <sup>1</sup>, Yasin Yüzbaşıoğlu <sup>1</sup>, Ercan Ateş <sup>1</sup>

#### **Abstract**

The purpose of this study was to examine the effects of 10 weeks of imagery and concentration exercises on visual focus in basketball players. 29 (13 female, 16 male) basketball players (15,62  $\pm$ ,09 years) participated in this study. The participants were evaluated pre-test in order to determine their success rates in free throw shooting and were equally divided into three groups. While the first group was assigned as the control group and only practiced with their own team, the second group conducted imagery exercises and the third group conducted concentration exercises for 10 weeks. Following the completion of the 10 weeks of exercises, we conducted the post-test with the eye tracker by having the players shoot free throws. In order to determine if there were any developments between the control, imagery and concentration groups in meanings of the basketball players focal ability, we conducted the non-parametric correlative Wilcoxon test. In conclusion, there was only a significant difference between the pre and post test of the concentration group (p<0.028).

Keywords: Basketball, Free Throw, Concentration, Imagery, Eye Tracker

# OP. 375 EXAMINING THE RELATIONSHIPS OF UNIVERSITY STUDENTS' WAYS OF COPING WITH STRESS, LIFE SATISFACTION AND SUBJECTIVE WELL-BEING (MANISA SAMPLE)

Murat Özşaker<sup>1</sup>, Zeynep Onağ <sup>1</sup>, Mesut Laçinkaya <sup>1</sup>, Ozan Arslan <sup>1</sup>, Onur Akın <sup>1</sup>, Mücahit Sülü <sup>1</sup> Celal Bayar University School of Physical Education and Sports

#### **Abstract**

**Purpose:** University studentship is last step before individuals creer adventure in their life. Therefore individuals have to clearly expose their exclusive conditions such as their characteristics, living conditions, level of awareness concerning life, self-respect, decision making styles. Persons who develop themselves in every sense correctly and prove their awareness will become successful individuals in their career and private life. In this respect in this research, relationship between university students' life satisfaction, level of subjective well-being and their ways ofcoping with stress is desired to investigate.

Method: Study group of the research consisting Celal Bayar University's 107 students from Faculty of Economics and Administrative Sciences, 117 students from School of Physical Education and Sport, 98 students from School of Applied Sciences, 96 students from Manisa School of Health which sum of 418 students in 2013-2014 academic year. Students ages vary between 17 and 31. In order to gather data from students, "Subjective Well-Being Scale" which is developed by Dost (2005), to investigate the level of stress among students "Coping with Stress Scale" which was developed by Özbay (1993) and adapted in to Turkish by Özbay and Şahin (1997) were used. For measuring students' life satisfaction "Satisfaction with Life Scale" which was developed by Diener, Emmans, Larsen ve Griffin (1983) and adapted in to Turkish by Köker (1991) was used. Besides to evaluate students sex, age, status of playing sports and academic success conditions, personal information form was used. Datas were gathered by survey method from study group. In the analysis of data stage, descriptive statistics, correlation analysis, Kruskal-wallis and Mann-Whitney U tests and regression analysis were used.

**Findings:** In research there are significant relationships between subjective well-being, life satsfaction and levels of coping with stress. Also in terms of schools there are differences between students'

<sup>&</sup>lt;sup>1</sup> Ege University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Celal Bayar University School of Physical Education and Sports

subjective well-being and life satisfactions and also students' life satisfaction levels are differenciated in terms of sex, academic success conditions and status of playing sports. When considering study group in terms of their grade, there are differences among life satisfaction levels, subjective well-being and levels of coping with stress.

**Conclusion:** As the result of study, students'subjective well-being therefore life satisfactions and levels of coping with stress were differentiated in terms of their age, sex, grade, academic success and status of playing sports were found.

Keywords: University Students, Life Satisfaction, Subjective Well-Being, Ways of Coping With Stress

# OP. 388 THE EFFECT OF ANXIETY LEVELS AND BODY MASS INDEXES ON THE SHOOTING SKILLS OF POLICE VOCATIONAL HIGH SCHOOL STUDENTS

 $\underline{\text{Fatih Karakaş}}^1$ , Soner Çankaya $^2$ , M.<br/>yalçın Taşmektepligil $^3$ , Musa Çon $^3$ 

#### **Abstract**

**Purpose:** The purpose of this study is to determine whether anxiety levels and body mass index affect the shooting skills of the students during the shooting training at Police Vocational High Schools where a significant number of the qualified personnel need of the law enforcement agency is met.

Material and method: A total of 182 students- 113 male and 69 female, between the ages 18-22- who were studying at Samsun 19 Mayıs Police Vocational High School participated in the study voluntarily. The success of shooting was assessed by the total score of the bullets that hit the target from a distance of 10 meters. State and Trait Anxiety Inventory (STAI) was used to assess the levels of anxiety. This inventory is filled to the students before shooting. Mass body index (MBI) calculations were made by using international criteria. After the required assumptions were checked, the data obtained was analyzed by Student t test to find out whether there were any differences in terms of gender and the status of doing sports and by one way variance analysis to find out whether there were any differences in terms of BMI. The association between the shooting scores and the scores of state and trait anxieties were assessed by Pearson correlation coefficient.

**Findings:**In terms of shooting success, a negative and statistically significant (r = -0.787; P < 0.001) correlation was found between the students' shooting scores and their state anxiety scores while a negative but statistically insignificant correlation was found between the students' shooting scores and their trait anxiety scores (r = -0.119; P = 0.108). In addition, a positive significant correlation was found between state and trait anxiety scores (r = 0.297; P < 0.001). On the other hand, while no statistically significant differences were found between the state and trait anxiety levels of the students in terms of their BMI and their status of doing sports (P > 0.05), significant differences were found between shooting (P = 0.004) and state anxiety scores (P = 0.012) in terms of gender.

**Conclusion:**It has been concluded that the excitement and stress caused by the elevation in the students' state anxiety levels affected the students' shooting skills negatively.

Keywords: Police, state Anxiety, Body Mass Index, shooting

<sup>&</sup>lt;sup>1</sup> Police Academy Ondokuz Mayıs Police Vocational School

<sup>&</sup>lt;sup>2</sup> Ordu University Faculty of Medicine Department of Biostatistics

<sup>&</sup>lt;sup>3</sup> Ondokuz Mayıs University Yaşar Doğu Faculty of Sport Sciences

# OP. 398 INVESTIGATION OF EXERCISE REASONS, BARRIERS AND LIFE SATISFACTION OF FEMALE STAFF IN ORDU UNIVERSITY ACCORDING TO SEVERAL VARIABLES

 $\underline{\text{Gozde Ers\"{o}z}}^1$ , Hasan S\"{o}zen  $^1$ , Burkay Cevahircioğlu  $^1$ 

#### Abstract

The purpose of the present study was to put forward the exercise reasons and barriers and to examine the life satisfaction of female staff in Ordu University with regard to body mass index (BMI) and exercise habit. 75 female academic and official staff (n=75; Mage=31.87±4.14) voluntarily participated in this study. Quantitative and qualitative research methods were used in this study. The Satisfaction with Life Scale and Physical Activity Stages of Change Questionnaire (PASCQ) were administered to all participants. The data of exercise reasons and barriers were gathered through using a questionnaire including close ended questions formed by the researchers. Participants were classified into different BMI groups based on underweight, normal, overweight and obese but due to the small number of underweight and obese participants; these participants were combined with normal weight and overweight people. The descriptive statistics analysis were conduted to provide information about the overall characteristics of the sample. Independent samples t-test was used to test differences in life satisfaction of participants with regards to BMI (normal weight and overweight and exercise habit (doing exercise or not). The gathered data of exercise reasons and barriers were analyzed by employing the techniques of frequency analysis. The findings of this study showed that women who exercise regularly and have a normal weight had a higher average of life satisfaction than women who do not exercise regularly and are overweight. In addition, when women who exercise regularly were asked why they exercise, most of them said that they exercise for fun, health, wellness and losing weight. On the other hand, when women who do not exercise regularly were asked why they do not exercise, they said that they do not have time for exercise, they find exercise boring and exhausting and that they have some anxiety about my physical apparance.

Keywords: Exercise Reasons, Life Satisfaction, Exercise Behaviour

# OP. 403 COMPARISION OF OVERWEIGHT AND SLIM WOMEN'S BODY PERCEPTIONS BASED ON EXERCISE PARTICIPATION

Ömür Akkus<sup>1</sup>, Nihan Arsan<sup>2</sup>, Ziya Koruç<sup>1</sup>

#### Abstract

The purpose of this study is to compare the overweight and slim women's body perception levels based on exercise participation. Participants of the study were 300 women and all of them participated voluntarily, these women were; 75 overweight and 75 slim women who have been participating exercise in a fitness center which has branches in different places in Ankara Province and 75 overweight and 75 slim women who have never done exercise and live in Keçiören District of Ankara Province. In this study, multi-dimensional physical relationships scale was used in order to determine women's perceptions about their bodies, and Tanita was used to measure their weight. For analysis of data, descriptive statistical techniques and multivariate analysis of variance (MANOVA) were used. As a result of this study; significant differences were found among slim and overweight women [F (10,287) = 25,071; P = .000]; among those who have been participating and those who have not been participating in exercises [F (10,287) = 57,674]; among overweight-slim women who have been participating in exercises and overweight-slim women who never done exercise [F (10,287) = 18.130; p = .000]. According to this, slim women's perception levels about their bodies were more positive

<sup>&</sup>lt;sup>1</sup> Ordu University School of Physical Education and Sports

<sup>&</sup>lt;sup>1</sup> Hacettepe University Faculty of Sport Sciences

<sup>&</sup>lt;sup>2</sup> Doğu Akdeniz University Faculty of Education

than overweight women; perception levels about their bodies of women who have been participating in exercises were more positive than women who never done exercise; overweight women who never done exercise have more negative body perception than other groups; slim women who have been participating in exercises have more positive physical fitness orientation. In addition to this, anxiety about weight gain was higher in the group of overweight women who have been participating in exercises.

Keywords: Exercise Participation, Slim Women, Overweight Women, Body Perception

### OP. 405 A COMPARISON OF LEVELS OF QUALITY OF LIFE, DEPRESSION AND LONELINESS AMONG ATHLETES WITH DIFFERENT LEVELS OF TRAINING

<u>Saban Ünver</u><sup>1</sup>, Tülin Atan <sup>1</sup>, Gül Çavuşoğlu <sup>1</sup>, Vedat Erim <sup>1</sup>, Bade Yamak <sup>1</sup> <sup>1</sup> Ondokuz Mayıs University Yasar Doğu Faculty of Sport Sciences

#### **Abstract**

**Purpose:** The purpose of this study is to compare the levels of life quality, depression and loneliness among the students of the Faculty of Sports Sciences, national team wrestlers and professional (but not in the national team) wrestlers in terms of some demographic variables.

**Method:** The participants of the study included students from the Faculty of Sports Sciences of Ondokuz Mayıs University (37), national team wrestlers (40), and professional wrestlers who are not in the national team (36). The data was collected through a "Demographic Information Form" developed by the researchers and "Whoqol Bref Quality of Life Scale" (KF 36) to determine the quality of life, "Beck Depression Scale" to determine the levels of depression and "UCLA Loneliness Scale" to determine the levels of loneliness. For the statistical analysis of the data, Kolmogorov Smirnov was used to determine whether the data had a normal distribution and the results indicated that the data did not have a normal distribution. Kruskal Vallis and Mann Whitney-U test were used for the statistical analysis of the data. 0.05 was accepted as the level of significance.

**Findings:** When the scores of the groups were compared, no significant difference was found between groups in terms of mental health which is one of the sub-scales of the quality of life scale (p<0.0166) while another sub-scale, social functioning, was found to be lower in elite wrestlers (p<0.0166). In another comparison between the groups, loneliness and despair scores of the elite wrestlers were found to be higher (p<0.0166). When the scores of the athletes were examined in terms of gender, levels of loneliness were found to be higher in women than in men (p<0.01). Social functioning scores and loneliness scale scores of the participants were found to differ significantly based on the age (p<0.05). Athletes younger than 20 were found to have lower social functioning scores than athletes older than 20 while their loneliness scores were higher (p<0.05). In the comparison of the scores of the participants who were in the national team and who were not, a statistically significant difference was found in the scores of the social functioning sub-scale and loneliness scale (p<0.01). The athletes who were not in the national team were found to have lower social functioning scales and higher loneliness scales when compared with the athletes who were in the national team (p<0.01).

Conclusion: As a conclusion, the athletes who were not in the national team were found to have high loneliness and despair scores and low social functioning scores and the female participants were found to have higher loneliness scores. Another interesting finding of the study is the low social functioning and high loneliness scores of the participants younger than 20. When the results of the study were assessed in general, it was observed that the athletes in the national team experienced less loneliness than the athletes who were not in the national team. This result indicates the significance of having a successful sportive identity in terms of loneliness. Within this context, it will be of use for trainers to give importance to activities and trainings that will contribute to a successful identity formation.

Keywords: Depression, Loneliness, Quality of Life, Wrestler

### OP. 407 THE RELATION BETWEEN SELF-RESPECT LEVELS AND LIFE QUALITY LEVELS OF DISABLED AND ABLE BODIED TENNIS SPORTSMEN

### Adem Civan<sup>1</sup>

<sup>1</sup> Selçuk University School of Physical Education and Sports

#### **Abstract**

aim: This research has been carried out in order to determine self-respect and life quality levels of disabled and able bodied tennis sportsmen; and also to set forth the relation between their self-respect and life quality levels.

methods: The research group consist of total 44 sportsmen including 22 disabled tennis  $\operatorname{sportsmen}(n_{(women)}=9, n_{(man)}=13)$ , and 22 able bodied tennis  $\operatorname{sportsmen}(n_{(women)}=9, n_{(men)}=13)$ . Personal data sheet improved by the researchers, World Health Organization Life Quality Scale National Short Form in Turkish (WHOQOL-BREF TR) and RosenbergSelf-Respect Scale developed byRosenberg (1965) and adapted into Turkish by Çuhadaroğlu (1986) have been used as data collection tools in the research.

Results: Whether the data is shoved normal distribution was studied with Kolmogorov-Smirnov test; and at the end of this study, t test has been used for double cluster comparisons because of the data has shoved normal distribution. Pearson product-moment correlation coefficient technique has been benefited for testing of whether there is significance correlation between two scale points. The significance level has been taken as 0.05 in the research.

At the end of the research, it has been determined that life quality levels of disabled sportsmen and able bodied sportsmen are high level, in general; as for their self-respect levels are medium level. conclusion: In comparing of the life quality levels of the sportsmen in respect of the sportsmen are disabled or able bodied, while no significant difference has been determined in physical, social and environmental-tr areas, a statistically significant level difference in favor of disabled sportsmen has been determined in spiritual area. In the comparison of self-respect levels of the sportsmen as per whether the sportsmen are disabled or able bodied, although it has been shown that the self-respect levels of able bodied sportsmen is higher than disabled sportsmen it has been determined that this difference is not statistically significant. Furthermore, it has been found that there is not any significant correlation between self-respect levels and life quality levels of disabled sportsmen and able bodied sportsmen.

Keywords: Self-Respect, Life Quality, Disabled, Sport

# OP. 414 THE ROLE OF PASSION IN PREDICTION OF JOB SATISFACTION AND LIFE SATISFACTION IN FITNESS LEADERS

 $\underline{\rm Selen\ Kelecek}^1,$  Atahan Altıntaş $^1,$  Feyza Meryem Kara $^1,$  F. Hülya Aşçı $^2$ 

#### **Abstract**

#### **Objective**

The purpose of this study was to investigate the role of passion in predicting job and life satisfaction in fitness leaders. The secondary purpose was to examine the gender and job experience differences in these variables.

#### Methods

Eighty nine females ( $M_{age}$ = 28.83 ± 4.43) and 111 males ( $M_{age}$ = 30.07 ± 4.28), totally 200 ( $M_{age}$  = 29.52 ± 4.38) fitness leaders, who are working in private and public sport clubs, voluntary participated in this study. "Passion Scale" (Vallerand, Mageau, Leonard, Blanchard, Koestner, Gagne & Marsolis, 2003), "Satisfaction With Life Scale" (Diener, Emmons, Larsen & Griffin, 1985), and "Minnesota Job

<sup>&</sup>lt;sup>1</sup> Başkent University Faculty of Health Sciences Department of Sport Sciences

<sup>&</sup>lt;sup>2</sup> Marmara University School of Physical Education and Sports

Satisfaction Questionnaire" (Weiss, Dawis, England & Lofquist, 1967) were administered to participants. Stepwise Multiple Regression Analysis was used to determine whether fitness leaders' levels of passion predict their job and life satisfaction. 2 x 2 (gender x year of job experience) Multivariate Analysis of Variance (MANOVA) was used to test the effect of gender and year of job experiences differences in passion and job satisfaction. Furthermore, 2 x 2 (gender x year of job experience) ANOVA was conducted to test gender and year of job experience differences in life satisfaction.

#### **Results**

Results of Stepwise Multiple Regression Analysis indicated that obsessive passion was a significant predictor of extrinsic job satisfaction (R=0.61; R<sup>2</sup>=0.37; p<.01) subscale of job satisfaction. Results also indicated that both harmonious and obsessive passion was a significant predictor of intrinsic job satisfaction (R=0.61; R<sup>2</sup>=0.37), general job satisfaction (R=0.63; R<sup>2</sup>=0.39) and life satisfaction (R=0.64; R<sup>2</sup>=0.41) of fitness leaders (p<.01). The 2 x 2 (gender x year of sport experience) 2 x 2 MANOVA results showed that participants' passion scores differs with regard to year of job experience (Hotelling's T<sup>2</sup>=0.08;  $F_{(2,195)}$ =7.38; p<.05), but there was no differences with regard to gender (Hotelling's T<sup>2</sup>=0.03;  $F_{(2,195)}$ =2.56; p>.05). In addition, the Gender x Year of Job Experience interaction was not significant (p>.05). Follow up univariate analysis revealed that harmonious passion scores differ according to experience ( $F_{(1,199)}$ =8.39; p<.05), and fitness leaders who have job experience less than 5 years, have higher harmonious passion scores than fitness leaders who have job experience more than 6 years. Furthermore results of 2 x 2 MANOVA for job satistaction, indicated that fitness leaders' job satisfaction scores did not differ with respect to gender and year of job experience (p>.05). Furthermore, ANOVA did not reveal statistically significant difference in life satisfaction scores in terms of gender and year of job experience (p>.05).

#### Conclusion

It can be concluded that, the more fitness leaders love their profession, the more they satisfy with their job and life. In addition, it can be said that, gender and job experience has no effects on fitness leaders' job and life satisfaction.

**Keywords: Fitness Leaders, Passion, Job Satisfaction, Life Satisfaction** 

### OP. 440 EXAMINATION OF SPORTSPERSONSHIP ORIENTATION AND EMPATHIC SKILLS OF YOUNG CHILDREN IN TERMS OF GENDER

### Gülfem Sezen Balçıkanlı<sup>1</sup>

#### Abstract

It is the aim of this study to examine whether there is a difference between sportspersonship orientation and empathic skills of young children in terms of gender. In this respect, Multidimensional Sportspersonhip Orientation Scale- MSOS (Sezen, 2010), including such sub-factors as *Respect for social conventions, Respect for the rules and the officials, Respect for one's full commitment toward sport participation and Respect and concern for the opponent,* was employed to measure sportspersonship orientation, while the Empathy Scale for Young Children (Yüksel, 2006) was used for empathic skills. Research group contains a total of 201 young children from various sport clubs in Ankara in different branches namely volleyball (25%), handball (49.8%), basketball (24.4%). Various age groups such as 10 (28.4%), 11 (26.4%), 12 (8%), 13 (8%) and 14 (29.4%) constitute randomly selected young children. When we look at sports experience of young children, it is seen that 44.3% of young children have been doing sports for 3-4 years, whereas 15.4% have been involved in sports for 5-6 years. Kolmogorov Smirnov test was used for normality. In order to identify whether there was a difference in terms of gender, Mann Whitney U test was employed. The findings indicated that there is a difference in terms of gender in sub-factors, respect for social conventions (.000) and respect and

<sup>&</sup>lt;sup>1</sup> Gazi University School of Physical Education and Sports

concern for the opponent (.000). Girls are assumed to be more oriented to social conventions and to respect for the opponent than boys. Once respect for the rules and the officials and respect for one's full commitment toward sport participation are examined, girls are seen to be more oriented to respect for the rules and the officials (.277) and respect for one's full commitment toward sport participation (.796). However, this difference is not statistically significant. When the data concerning empathy are observed, girls are seen to be more empathic than boys, which is also seen in statistical analysis. As a result, it can be concluded that girls' sportspersonship orientation and empathic skills are higher than those of the boys.

Keywords: Children, Sportspersonship, Empathy

# OP. 464 PSYCHOLOGICAL CHANGES IN ATHLETES DURING INJURY AND AFTER TREATMENT

Zeynep Aydoğan<sup>1</sup>, Perican Koruç Bayar <sup>1</sup>

#### **Abstract**

**Aim:** The purpose of this study is to compare different athletes in different branches by taking in consideration their self-confidence and competencies as well as their level of worry.

**Method:** Overall all 69 athletes participated in this test their injury is as follows: volleyball (28), basketball (5), football/soccer (21), handball (10) and 5 more other branches. The average age for the participants were 23.23 and the deviation was 5.84. Out of 69 athletes 16 were female and 53 were male. Rossenberg Self Esteem Scale (RSES), Sportive Self Confidence Indicator Scale and Test (SCI-T/S), Self Esteem Scale (SES), State-Trait Anxiety Inventory were also used. They were assessed for a second time when doctors members of the Foundation of Orthopedics Traumatology as well as from Association of Sport Injuries in Ankara who had treated them and allowed them to return to their career. ANOVA was used to analyze the data, descriptive statistics and comparison.

**Findings:** Research findings made during and after treatment of athletes in the state  $\{F(1, 66)=4.862; p=.000\}$  and trait  $\{F(1, 66)=7.646; p=.000\}$  anxiety were found out to be higher. While comparing self-efficacy after treatment statistically there was a significant reduction in athletes' self-efficacy was observed  $\{F(1, 66)=3.18; p=.001\}$ . During the comparisons made at athletic self-confidence (state and trait) it has been observed that there was an increase in their self confidence level  $F(1, 66)=7.646; p=.000\}$  in both state and trait wise which also was observed to be parallel and meaningful with the statistics at hand  $\{F(1, 66)=4.862; p=.000\}$ . Also it has been found out that there was an significant increase in the athletes self-esteem  $\{F(1, 66)=21.791; p=.000\}$ .

**Result:** As a result it can be said that even if the athletes had made full recovery from their previous injuries and there was no objection to return to their career they suffered and feared from questions such as being injured again not being able to regain their old form not being able to find a sport on the team which as a result increased their anxiety level and decreased their belief in their self-sufficiency. In contrast, athletes who have been treated and recovered from injuries, showed an increase in self-esteem and self-confidence caused by relaxation brought about their treatment thus triggering an another increase in the state-trait self-confidence. Which proves that psychological rehabilitation is required after injuries at athletes.

Keywords: Anxiety, Self-Confidence, Self-Efficacy, Self-Esteem, Sports injuries

<sup>&</sup>lt;sup>1</sup> Ankara University Faculty of Sport Sciences

# OP. 479 AN ANALYSIS OF THE EMOTIONAL CONTROL LEVELS OF THE STUDENTS STUDYING AT THE FACULTY OF SPORTS SCIENCES

Gül Çavuşoğlu  $^1$ , Bade Yamak  $^1$ , <br/> Şaban Ünver  $^1$ , Kezban Kılıç  $^2$ 

#### **Abstract**

**Purpose:** The purpose of this study is to analyze the emotional control levels of the students studying at the Faculty of Sports Sciences in terms of some variables.

**Method:** A total of 420 students, 123 female and 297 male, who were students at the Faculty of Sports Sciences of Ondokuz Mayıs University during the Academic Year 2012-2013 participated in the study voluntarily. The data was collected through "Demographic Information Form" developed by the researchers in order to measure the emotional control levels of the participants and "Courtauld Emotional Control Scale" (CECS) developed by Watson and Greeer (1983) and adapted to Turkish by Okyayüz (1993). The data was analyzed through Kolmogoroc Smirnov and Mann Whitney U test. The level of significance was 0.05.

**Findings:** As a result of the statistical analyses, anger control level scores, a subscale of CECS, of the male participants were found to be high. As for the variable of working parents, anxiety control levels of the participants whose mothers worked were high while the unhappy and anxious control level scores of the participants whose fathers worked were high. As for the variable of branch and family income, no significant difference was found between total CECS scores and subscales scores.

Conclusion: The result that the male participants had higher anger control score averages than the female participants may be resulting from the fact that women have more work load in the family than men and thus instead of controlling their emotions, they reflect these emotions as a way to feel relieved and in return they have lower anger control levels. Higher anxiety control level scores of the participants whose mothers work may be resulting from the fact that the children whose mothers work have more communication problems and they control and suppress their emotions such as anxiety since they have some emotional needs that can be met by the mothers but they feel a lack of these emotions since their mothers are working. High unhappy and anxious control level scores of the participants whose fathers worked was a surprising result. However, this situation is thought to be resulting from the fact that the fathers who are working cannot have enough time for their children. According to branch in the scores of CECS there isn't a significant difference so this can be considered because of the fact that all participants study in the Faculty of Sports Science and they always interested with sports.

Keywords: Anger, Anxiety, Emotional Control, Sport

# OP. 481 A SOCIAL GROUP FORMED BY THE INDUSTRIAL FOOTBALL: THE CUSTOMER SPECTATOR

 $\underline{\text{Fatih Gür}}^1$ , Savaş Çağlayan  $^2$ , Savaş Duman  $^3$ 

### **Abstract**

#### **PURPOSE**

Football is one of the most important social phenomenon in our era. Attracting great attention of the masses all over the world, this game now has a new dimension revealed by the attribute 'industrial' put in front of its name. What makes football that much important is the football fans. So, as football changes and improves, was its fans remained unchanged?

<sup>&</sup>lt;sup>1</sup> Ondokuz Mayıs University Yaşar Doğu Faculty of Sport Sciences

<sup>&</sup>lt;sup>2</sup> Ondokuz Mayıs University Letter and Sciences Faculty / Department of Statistics

<sup>&</sup>lt;sup>1</sup> Ankara University Faculty of Sport Science

<sup>&</sup>lt;sup>2</sup> Mugla University Faculty of Arts and Science

<sup>&</sup>lt;sup>3</sup> Mugla University Physical Education and Sport College

The purpose of this study is to use a sociological approach to evaluate the change undergone by fans, which are an important part of the game, when football turns into an industry.

#### **METHOD**

The population of study form Trabzonspor fans, and the study sample consists of 170 Trabzonspor fans that participated in the questionnaire and interview applications. The study was planned as a qualitative research, and observation, interview and survey methods were utilized.

During the research, a literature review was performed on the subject, and attended in four league games and one cup game of Trabzonspor between November 26, 2012 and December 28, 2012. The questionnaire was applied to a total of 170 fans, of which 85 were fans in behind the goal post and 85 fans in the grandstand. Interviews were conducted with tribune leaders and fans of Trabzonspor.

The survey results were analyzed through SPSS software using frequency and percentage values, and the results obtained were discussed in a theoretical framework using the results from interviews and observations.

#### **RESULTS**

#### **Examples from the Interviews**

Tribune leader (J.B.) says that the club gives free tickets today as well. In addition, he says that those free tickets are sold to ordinary spectators by fans, and the fans that sold their own free tickets cancel their tickets after 3-4 weeks by claiming that they were lost, and obtain new free tickets.

"Here, I put the blame on the Club Management. I've been telling them since the beginning that this tribune habit must to be changed! Those people sell the free tickets they got from the club. It's a fact, that is there are no ifs and buts; we see it with our eyes... They get 1000 tickets and sell 800 of them... And, after three games they cancel the tickets and get new ones for free... Now, the club is not renewing the lost tickets...", says (J.B.)

One the spectators behind the goal post, (O.C.) says that club management is in cooperation with the fan club's leaders, and emphasizes the relationship of mutual interest in a sense.

"Today, the people who swearword the players or the managements at the stadium are the people who cannot get their money's worth. In no case the fans behind the goal post abuse management, because they are in collaboration with the management... What's the end result then? Conflicts and fights occur between the fans who have free tickets and the fans who shout out for management's resign by thinking that they cannot get their money's worth..." says (O.C.)

#### **CONCLUSION**

As a result of the study; the Trabzonspor fans' relationship with the industrial football, reflection of this relationship onto the stands, the change undergone by Trabzonspor fans in this process, and effect of this change in Turkish football was evaluated based on the tools of sociology. Consequently, although the football industry tries to survive in Turkey, it was observed that there is no planned and systematic study conducted accordingly. Lack of professional sports managers, the affiliation between media and the football, presence of an organic bond between fan groups and the club do not overlap with the efforts on turning football into an industry in Turkey.

Keywords: Customer Spectator, Fan, Industrial Football, Spectator

### OP. 487 THE RELATIONSHIP BETWEEN SELF ESTEEM IN DECISION-MAKING AND DECISION MAKING STYLES OF THE CLIMBERS' AGES AND COPING WITH STRESS

 $\underline{\operatorname{Burak}\,\operatorname{Kural}}^1,$  Tekin Çolakoğlu $^2,$  Suat Karaküçük  $^2$ 

#### **Abstract**

**Problem Situation:** Individuals with different characteristics have an impact on decision making behavior. Complex and multi-choice situations make decision-making quite difficult. This process can become stress factors for the individual. Also this complexity of the decision adversely effects the individual's decision-making situation. Also stress effects the individuals' attention, their evaluation of

<sup>&</sup>lt;sup>1</sup> Karadeniz Technical University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Gazi University School of Physical Education and Sports

the options and decision-making process. In other words, stress reduces the chance of discovering the optimal selection in a complex situation. From this perspective, the mountaineers' deciding styles, ways of coping with stress in the face of stressful situations and their interpersonal relations are seen as important in terms of adaption to social life.

**Research Objectives:** The main objective of this research is to investigate the athletes' who are interested in mountaineering activities ability of coping with stress, self-esteem and their styles of decision-making and to investigate whether there is a relationship between coping with stress, self-esteem and styles of decision making by demographic characteristics obtained from the personal informations of the climbers.

**Method**: In total 130 climbers; 27 (20.18%) women and 103 (79.2%) men from Turkish Mountaineering Federation who have "mountaineering training completion certificate" have participated to the research. While the collection of data the Inventory of Coping Stress and Melbourne Decision Making scales were used. In the data analysis, ANOVA and t test were used in order to determinate the significant differences of the scores according to their demographic characteristics obtained from scales by the climbers. The relationship between coping with stress and decision making has been tested with Pearson's correlation analysis. The points obtained from the data and the results of the analysis are interpreted by comparing their size ratio.

**Findings**: According to the findings, there are 18 (13,18%) climbers between 18-22 ages, 21 (16,2%) climbers between 23-27 ages, 19 (14,6%) climbers between 28-32 ages, 22 (16,9%) climbers between 33-37 ages and 50 (38,5%) climbers between 38 and older. It is observed that according to F=3,11, p<0,5 there is a significant differences among Escape-Abstraction (Sensory-Actual) dimension which is the sub-dimension of mountaineers' ages and coping with stress and according to F=2,48, p<0,5 there is a significant difference among Escape-Abstraction (Biochemical) dimension. Also it is found that according to F=3,71, p<0,5 there is a significant difference in mountaineers' self-esteem by their ages.

**Conclusion and Recommendations:** According to the research it is identified that in the face of stress for young climbers they apply to biochemical pathways such as smoking, alcohol, drugs and drug use and they fled from stressful events in a passove way or abstract themselves. In addition when their age levels increase it is identified that there are increases in the size of acception-cognitive restruction, active planning, foreign aid search and religious orientation in the face of stress.

It is observed that high-age of climbers are more confident and more self adopter than young climbers in decision making process.

Keywords: Mountaineering, Coping With Stress, Decision-Making

# OP. 499 100 YEARS AGO, PHYSICAL EDUCATION TEACHING: A SAMPLE OF LESSON PLAN

### Sabri Özçakır<sup>1</sup>

#### **Abstract**

The aim of this study is to assess physical education teaching in the first quarter of 20. centrury and compare similarities and differences with today. In this study, document investigation -in the other words historical methodology-, which is a kind of qualitative research approach, is used and and the primary sources -especially Selim Sırrı Bey's books- dating back to mentioned years are benefited in this study. As findings of this study reveal, many exercises which is used in the past is still take place in physical education courses and lesson plans.

Keywords: Gymnastics, Physical Education, Selim Sırrı Bey.

<sup>&</sup>lt;sup>1</sup> Abant İzzet Baysal University School of Physical Education and Sports

### OP. 505 CRITICAL APPROACH: FOOTBALL AND FOOTBALL MEDIA AS A CULTURE INDUSTRY PRODUCT

### Selami Özsoy<sup>1</sup>

Abant İzzet Baysal University Faculty of Communication

#### **Abstract**

Objective: Today, the concept of sports is associated with commercialized and industrialized elite sports instead of the activities that are required to sustain healthy lives. Football, the most common sports field, is the first area in which capitalism can deepen its hold on society and renew it.

Method: This conceptual study examines how Marxist critical theorists, led by Frankfurt school of thought and French structuralism, address sports.

Findings: According to critical theorists; culture industry products such as cinema, television and music entertain and divert the masses from thinking about the realities of life. Today's culture industry which is based on commodification serves to spread a shallow culture instead of a culture with depth. Sports, transmitted to the masses via the media, are now a part of this shallow culture.

According to culture industry, first conceptualized by the representatives of the Frankfurt school of thought Adorno and Horkheimer, masses have become the objects that are shaped by the culture instead of subjects that establish it. In today's society, individuals cannot establish the culture but rather; culture shapes the individuals it harbors. When considered as a part of the culture industry, sports are one of the mass entertainment and diversion tools that define the lifestyle of individuals. Since their birth, individuals are regarded as possible fans of one of the football clubs and "commercialized sportive ownership" determines most of their consumption from food to clothing. Clubs market their fans to advertisers and television companies that broadcast football contests to provide income.

French structuralist thinker Althusser regards sports as a cultural ideological state apparatus such as educational institutions and the media while citing the Ideological State Apparatus (ISA). According to Althusser, ISAs cause incorrect assumptions about the world and society in which individuals live in.

Sports are regarded as tools for entertainment in totalitarian regimes as well. Literature includes quotations from Franco in Spain and Salazar in Portugal about the use of football for this purpose while continuing their dictatorship.

According to Chomsky, sports are used for brainwashing. Sports hold individuals from thinking and being concerned about the real important issues in their lives.

Result: According to critical thinkers, sports such as football -the focus of interest for the masses- is a field in which injustice in income distribution is legitimized.

**Keywords: Sports, Culture Industry, Critical Theory** 

# OP. 533 PSYCHOLOGICAL AND PHYSICAL PREDICTORS OF SOCIAL PHYSIQUE ANXIETY IN MALE AND FEMALE COLLEGE STUDENT ATHLETES

Murat Sarıkabak<sup>1</sup>, Hasip Cana<sup>2</sup>, Halil İbrahim Genç<sup>3</sup>, İpek Kolayiş<sup>1</sup>, Serdar Tok<sup>1</sup>

#### **Abstract**

#### **Purpose**

The purpose of the study was to investigate the ability of personality traits, perfectionism and physical characteristics (waist, hip, shoulder and chest widths, body fat ratio) to predict social physique anxiety in male and female college student athletes.

<sup>&</sup>lt;sup>1</sup> Sakarya University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Sakarya University Kırkpınar Vocational School

<sup>&</sup>lt;sup>3</sup> Kütahya Dumlupınar University Institute of Health Sciences

#### Method

The sample consisted 148 male and 78 female college student athletes ranging in age from 18 to 26 (mean = 23.18, standard deviation = 3.7). In order to measure psychological variables, Short From Five Factor Personality Inventory, Social Physique Anxiety Scale and Positive and Negative Perfectionism Scale were used. Shoulder, chest, waist and hip widths were measured as described by Zorba (2006). In addition, body fat percentages were determined in accordance with the formula of Yuhasz amended by Faulkner (1968). To analyze the data Pearson correlation and regression analyses with stepwise method were carried out.

#### Results

At the first stage of the statistical analyses, the relationship among social physique anxiety and its possible antecedents namely personality (Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness), positive and negative perfectionism and physical characteristics were examined in male and female samples separately. Results showed that in male sample, group social physique anxiety was negatively associated with Extraversion (r = .29, p = .001) and positively associated with Neuroticism (r = .37, p = .001) and negative perfectionism (r = .19, p = .002). In female sample, social physique anxiety was negatively associated with Extraversion (r = .39, p = .001), Conscientiousness (r = .34, p = .001), Openness (r = .34, p = .001) and positively associated with Neuroticism (r = .52, p = .001), and negative perfectionism (r = .35, p = .003).

None of the physical characteristics was associated with social physique anxiety in males. However, social physique anxiety was negatively associated with chest width (r = -.31, p = .010) and positively associated with waist and (r = .29, p = .015) and hip width (r = .30, p = .011) in female sample.

At the second stage of the data analyses two regression analyses with stepwise method were carried out to examine the predictive ability of the model containing personality traits, perfectionism and physical characteristics.

Results showed that regression model containing only extraversion and neuroticism could explained small but yet significant amount of variance ( $R^2_{adj} = .13$ , F (2,144) = 11.10, p = .001) in males. In female sample, neuroticism and waist width explained significant amount of variance ( $R^2_{adj} = .29$ , F (2,101) = 22, 40, p = .001).

#### Conclusion

Overall, the present study showed that the relationship among social physique anxiety and its antecedent namely personality, perfectionism and physical characteristics is stronger in the female sample. Further study also showed that social physique anxiety may have different predictors in male and female athletes.

Neuroticism has been found to be a significant predictor of social physique anxiety in males and females However, Neuroticism had greater predictive power for females' body social physique anxiety which means that females having concerns related to their physical appearance may be more predispose to depression, anxiety and eating disorders.

Extraversion appeared to be a significant predictor of social physique anxiety only in males. This result may provide evidence for the claim that males who satisfy with his body may be more extraverted.

Among the physical characteristics, waist width emerged a significant predictor of social physique anxiety only in females which means that objective physical measures may be associated with body image concerns only in females.

Keywords: Social Physique Anxiety, Perfectionism, Personality

### OP. 560 RESEARCH OF AGGRESSIVE STATES OF STUDENT ATHLETE PARTICIPATING INTER HIGH SCHOOL COMPETITIONS

Halil İbrahim Çakır<sup>1</sup>, Mehmet Acet <sup>1</sup>

#### **Abstract**

#### **Purpose**

The research aims to search for aggressive states of student athletes participating inter high school competitions and to determine the relationship with sport and aggressiveness in many aspects as well.

#### Methodology

490 student athletes from 26 high schools participating inter high school competitions in the academic year 2013-2014 in Rize were chosen regarding random cluster sampling method. Personal Information Form developed by the researcher and Aggressiveness Inventory developed by İpek İlter (Kiper) were used as data collection tools. Regarding the distribution of data, primarily normality test (Kolmogorow-Smirnov D test) was applied. Distribution of the student athletes and their percentages were determined through descriptive statistics. In comparing aggressiveness states according to variables such as gender, type of school and sport of student athletes, Independent Sample T Test was applied at  $\alpha$ =0.05 significance level. In comparing aggressiveness states according to variables such as gender, type of school and sport of student athletes, Independent Sample T Test was applied at  $\alpha$ =0.05 significance level. In comparing aggressiveness states according to age variable (4 groups), One Way Anova was applied at  $\alpha$ =0.05 significance level. Tukey HSD, a second-level test, was used for differences between groups found significant. Microsoft Excel 2003 was used to input data into computer and to draw graph; SPSS 20.0 was used to analyse data.

### Findings

As a result of the analysis, there hasn't been a significant difference in student athletes sub-scale scores of assertiveness according to their age, gender, type of school and branch of sports (p>0.05). According to age, gender, types of school and branch of sports there has been significant differences in sub-scale scores of student athletes destructive, passive and general agression (p<0.05).

#### Results

Finally, in puberty the older student athletes get, the more their aggressiveness level is; males are more aggressive than females; student athletes of vocational high school are more aggressive than those of general high school; and lastly student athletes doing team sports, are more aggressive than those doing individual sports.

Keywords: High School, Student Athletes, Aggressiveness, Sports

# OP. 569 EFFECTS OF 6 WEEKS PSYCHOLOGICAL SKILL TRAINING ON TEAM COHESION, SELF-CONFIDENCE & ANXIETY: A CASE OF YOUTH BASKETBALL PLAYERS

Bülent Okan Miçooğulları<sup>1</sup>, Sadettin Kırazcı<sup>2</sup>, Fevziye Hülya Aşçı<sup>3</sup>

#### **Abstract**

The purpose of this study was to examine the impact of six weeks psychological skills training program (PST) based on cognitive-behavioral conceptual framework on the team cohesion, confidence, and anxiety of an intact team. Participants consisted of two teams of 36 male youth basketball players.

<sup>&</sup>lt;sup>1</sup> Dumlupınar University School of Physical Education and Sports

<sup>&</sup>lt;sup>1</sup> Nevşehir Hacı Bektaş Veli University Faculty of Education Department of Physical Education and Sport Education

<sup>&</sup>lt;sup>2</sup> Middle East Technical University Faculty of Education Department of Physical Education and Sports

<sup>&</sup>lt;sup>3</sup> Marmara University School of Physical Education and Sports

The PST program consisted of team building, goal setting, relaxation, imagery, self-talk, pep-talk, converting thoughts, autogenic training, and progressive relaxation techniques. For the quantitative part of the study Group Environment Questionnaire (GEQ), the Trait Sport-Confidence Inventory (TSCI), and the State-Trait Anxiety Inventory (STAI) were given during the pre-intervention, post-intervention, first, second and third follow-up tests. Qualitative process was used in current study to support validation of implied PST program. Six players and coach were interviewed with semi-structured questions. A mixed design MANOVA revealed significant differences over time for team cohesion ( $F_{[16, 19]} = 3.25, p < .05$ ). A mixed design ANOVA revealed significant differences over time for self-confidence ( $F_{[4, 31]} = 12.05, p < .05$ ) but there was no significant differences for anxiety ( $F_{[4, 31]} = .58, p > .05$ ). Moreover, comparison between experimental and control group results indicated that there was a significant results between those two groups. Overall, it was concluded that the PST program with experimental team affected athletes' team cohesion and self-confidence levels positively but there was no significant affect on athletes' anxiety levels.

Keywords: Psychological Skill Training Program, Team-Cohesion, Self-Confidence, Anxiety

# OP. 571 RELATIONSHIPS AMONG SELF EFFICACY, ACHIEVEMENT GOALS AND SOCIAL APPEARANCE PERCEPTIONS IN UNIVERSITY BASKETBALL PLAYERS

Elif Nilay Ada <sup>1</sup>, <u>Fatma Çepikkurt</u> <sup>1</sup>, Zişan Kazak Çetinkalp <sup>2</sup>, Aksel Çelik <sup>3</sup>

#### **Abstract**

Aim: The purpose of this study was to determine the relationships among self-efficacy, achievement goals and social appearance perceptions in university basketball players. It was also aimed to determine the effects of gender and BKI on self-efficacy, achievement goals and social appearance perceptions.

Method: The study sample was 98 women ages of 18 to 28 (Xage=21.17; SD=1.83) and 77 men ages of 17 to 28 (Xage=21.56; SD=2.04). Data's collected by using "Self Efficacy Questionnaire", "2x2 Achievement Goals Questionnaire for Sport" and "Social Appearance Anxiety Scale-SAAS". Data were analyzed using Pearson correlation analysis, Two-way MANOVA and independent-t test.

Findings: According to the results of correlation analysis; there are positive correlations between SAAS and mastery approach (r=.20; p<.01); and SAAS and self-efficacy (r=-.23, p<.01). Also positive correlation was found between self-efficacy and mastery approach (r=.16; p<.05) and performance approach (r=-.28, p<.01). Two way MANOVA were used to determine the effects of gender and BKI on self-efficacy, achievement goals and social appearance anxiety. According to results, there were no effects of gender and BKI on self-efficacy, achievement goals and social appearance anxiety (Wilk's Lambda=.05; p>.05). Also, independent sample t-test was used to determine the differences in self-efficacy, achievement goals and social appearance anxiety average scores according to gender. Based on the results of independent sample t-test, there are differences between men and women players of performance avoidance and mastery avoidance subscales. It was determined that women's avoidance goals average scores are higher than men's.

Result: Accordingly, it is found out that basketball players pay attention to environments' commets on their appearances and so this affects their own self-efficacy and achievement orientation. Additionally, it has been concluded that women basketball players are more feel uncomfortable about the situation to perceive as failure than men.

Keywords: Basketball, Self-Efficacy, Achievement Goal, Social Appearance Anxiety

<sup>&</sup>lt;sup>1</sup> Mersin University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Ege University School of Physical Education and Sports

<sup>&</sup>lt;sup>3</sup> Dokuz Eylül University School of Sport Sciences and Technology

### OP. 596 THE JOURNEY OF CHANGING INTERGENERATIONAL PHYSICAL ACTIVITY FROM PAST TO THE FUTURE: GRANDCHILDREN, MOTHERS AND GRANDMOTHERS

Pınar Öztürk<sup>1</sup>, Canan Koca <sup>1</sup>

#### Abstract

**Purpose:** The purpose of this research, which was supported by Koç University Center for Gender Studies, was to analyze sport and physical activity experiences of three generations of women based on socio-ecological framework with the perspective of feminist cultural studies. In doing so, we tried to understand the differences in sport and physical activity experiences of three generations of women with gender perspective and to uncover knowledge transfer among three generations.

**Method:** In this study, qualitative research method was used to better understand the women's experiences based on critical and feminist paradigms. Data were collected by individual interviews with 144 women, from forty-eight families, across three generations from different socio-economic backgrounds and different cities (Adana, Ankara, İstanbul, Erzurum, Sinop and Ordu) in Turkey by purposeful sampling. We interviewed with adolescents (11-16 years old), with their mothers (35-45 years old), and with their grandmothers (55-75 years old). The duration of the interviews ranged from 30 to 120 minutes. The interviews were taped, transcribed and analyzed by using content analysis. Triangulation and peer scrutiny were employed to enhance the credibility of the research.

**Findings:** Data analysis showed that the sport and physical activity experiences of three generations of women were influenced by different socio-ecological factors (individual, social, physical and political). Because social, historical and cultural circumstances experienced by each generation is different. We found that first generation of women were the most physically active group whereas third generation of women were the least. On the other hand, sport which has never found a place in the lives of first generation gradually became a social phenomenon in the lives of second and third generations of women. The second generation of women had a childhood which is torn between physical activity and inactivity, since the transgeneration period. The journey of sport and physical activity in the history of three generations of women is driven by gender in terms of how, where and with whom they could participate in the public sphere. We figured out that gender produces commonalties as well as differences in their sport and physical activity experiences (in terms of SEM factors such as individual, physical environments and politics) among different generations of women.

**Results:** In the lights of the findings of the research, we proposed recommendations for developing macro and micro policies and practices to provide sport and physical activity opportunities for all women in a safe and supportive environment.

Keywords: Women, Generation, Gender, Sport And Physical Activity

# OP. 598 THE ATTITUDES OF ATHLETES TOWARDS SOCIALLY PERCEPTION THEMSELVES IN SPORTS: A STUDY FOR SCALE DEVELOPING, VALIDITY AND RELIABILITY

Ömer Tekçe  $^1$ ,  $\underline{\text{Funda Koçak}}^1$ , Oğuz Özbek  $^1$ 

#### Abstract

**Aim:** In our day, the effects of sports on the mental, physical and emotional development of an individual carry great importance. Besides, sports appear to be an important institution in helping an individual to socialize. Socialization, to put it in the simplest way, is a process which makes the individual a member of the social structure she lives in and which involves continuous learning. The sports environment is in itself a learning environment which contains many elements found in life such as winning, losing, competition and friendship. For this reason, the aim of this study is to develop

<sup>&</sup>lt;sup>1</sup> Hacettepe University Faculty of Sport Sciences

<sup>&</sup>lt;sup>1</sup> Ankara University Faculty of Sport Sciences

a reliable and valid scale to measure the attitudes of individual athletes towards socialization.

**Method:** A total of 272 competitive athletes (M<sub>age</sub>= 23,17, SS=5,36) chosen by the random sampling method, of which 116 are female and 156 are male and who live in the provinces of Ankara, İstanbul, Kayseri, Konya and Kastamonu, voluntarily participated in the study. In order to provide evidence for item validness, item-total test correlation was applied in the study; Kaiser Meyer Olkin (KMO) and Barlett Sphericity tests, exploratory factor analysis (EFA), and confirmatory factor analysis (CFA) was applied for the determination of the suitability of the data; and Cronbach's Alpha correlation coefficient was applied to provide evidence for reliability. The margin of error was defined as .05 for the study.

Findings: In the beginning, measurement tool was designed as a scale consisting of 30 items and in the style of 5-Point Likert Scale. Because the total test correlation of 7 items was smaller than "0.30" after the item-total test correlation was conducted primarily, these items were removed from the trial scale and the number of items were reduced to 23. The suitability of the data for the factor analysis was analyzed by KMO coefficient and Barlett Sphericity test. KMO coefficient was determined as .84 and Barlett Sphericity Test γ2 value as 1783,57 (p<.001). The findings acquired through the KMO coefficient and Barlett Sphericity test has showed that the sample size of the study is sufficient for factor analysis and the data is suitable for factor analysis. As a result of EFA it was determined that the scale has a three dimensional structure of 21 items consisting of social development (7 items), social sharing (7 items) and social admiration (7 items). The total variance explained by the 3 dimensions is %43.45. CFA was conducted in the study to determine whether the groups that contribute to the factor in the measurement tool consisting of three dimensions as a result of EFA are represented sufficiently by these factors. Critical N value for CFA was calculated as 190.46. This situation demonstrates that the sample group of 272 people used in the study is sufficient. First of all in the study, a first level confirmatory factor analysis was conducted for the model that consists of three latent variables of social development, social sharing and social admiration and 21 observed variables. As a result of the CFA and also by using suggested modification indexes, it was calculated that  $\chi$ 2/ sd=1.63, RMSEA=0.048, SRMR=0.055, NFI=0.91, CFI=0.96, GFI=0.90, AGFI= 0,88. In order to demonstrate whether the dimensions of social development, social sharing and social admiration acquired through the first level confirmatory factor analysis represent the theoretically put forward factor of social perception of the self in sports, a second level confirmatory factor model was created which provides the structural relations with the high level variable of social perception which is the higher dimension of the three dimensions. Socialization latent variable which is a second level variable was added to the first level confirmatory structure which is tested with 3 latent and 21 observed variables. The variances in the first level variables explained by the higher level (second level) socialization variable are demonstrated also by the second level factor analysis. The strongest relation (.87) is observed between "social sharing" and "social perception" according to the path coefficient between the second level "social perception" latent variable and first level latent coefficients and the t values, and it is also found that all the relations between the socialization factor and the three dimensions related to this factor are significant (p<0.05) and positive. As for the variances (R<sup>2</sup>) in the first level variables explained by the second level variable "social perception", the highest variance is explained in the social sharing variable (.74), the second in social admiration (.63), and third in social development (.52). Cronbach's Alpha coefficient regarding the whole of the scale is determined as .85, and the reliability coefficient for the sub-dimensions as, in order, .77,.78, and .74.

**Conclusion:** According to the analyses performed, measurement tool is a 5-Point Likert type scale consisting of 21 items and three sub-dimensions. Within the framework of the reliability and validity analyses performed, it was concluded that the measurements utilized to gather the data pertaining to the research model is strongly reliable and that distinctive validity is established. In conclusion, it is determined as a result of the validity and reliability studies that the scale developed for the athletes' attitudes towards socially perception themselves in sports is a utilizable instrument for measurement.

Keywords: Sports, Validity, Reliability, Attitude, Socially Perception

### OP. 610 WOMEN BOXERS: KEEPING THE GLOVES ON IN AND OUT OF THE BOXING RING

Esra Emir <sup>1</sup>, <u>Mustafa Şahin Karaçam</u><sup>1</sup>, Canan Koca <sup>1</sup>

#### **Abstract**

### Purpose:

2012 Summer Olympic has become the turning point for the women boxing and women gained acceptance to the boxing field that have been culturally and numerically a male preserved field. As a reflection of the everlasting gendered structure of sport favouring men, women have been marginalized and subordinated in boxing particularly however women existed at some point. In this sense, we aim to understand how women are marginalized and their strategies to survive in the boxing identified with masculinity.

#### Method

We employed the Bourdieu's social theory (1977) to analyse the boxing as a field which owns its own logic and rules within, and is linked with the social, cultural and political dynamics. To collect the data, the first writer made observations in different boxing saloons, took field notes and carried out individual interviews with amateur and professional women boxers. After recording all interviews and transcribing onto computer, we analysed the raw data with content analysis. We used the data and investigator triangulation techniques to increase the credibility and validity of the results.

#### Findings:

We discussed the findings under two themes: (1) Sex of the boxing and women's dilemma and (2) To put the gloves on in and out of the boxing ring. Findings showed that women themselves and others around the women have seen the boxing as a practice identified with masculinity. Some women boxers attributed their involvement into boxing to their masculine characteristics. Women boxers interviewed have been marginalized both in and out of boxing ring since the beginning of their boxing career and those women have employed various strategies to go on boxing.

#### Result:

As a result, women often struggles to be "like a woman" while also struggling to survive in the mostly male dominated structures of boxing by employing behaviours identified with masculinity. The study indicated that women are still seen as the outsiders to boxing field and marginalized in spite of the current development on behalf of women boxing.

Keywords: Women Boxing, Gender, Sport, Bourdieu, Strategy

#### OP. 614 PERFECTIONISM AND PERFORMANCE FAILURE

 $\underline{\mathsf{Fatma}}$ Çepikkurt $^1$ , Elif Nilay Daşdan Ada $^1$ , Esen Kızıldağ Kale $^1$ , Funda Coşkun $^2$ 

#### **Abstract**

**Objectives:** The purpose of this study was to determine the relation between perfectionism and performance failure of athletes. It was also aimed to compare the perfectionism and performance failure of athletes who were in national team or not and gender.

**Methods:** Fourty four national athletes (24 women, M<sub>age</sub>= 23.00; 20 men M<sub>age</sub>=21.40) and 34 non-national athletes (21 women, M<sub>age</sub>= 20.00; 13 men, M<sub>age</sub>= 19.08) were voluntarily participated this study. Multidimensional Perfectionism Scale- Sport (MPS-S) and Performance Failure Appraisal Inventory (PFAI) were used to assess the perfectionism and fear of performance failure. MPS-S consists of 19 items and 3 subscales. MPS-S subscales' Cronbach Alpha internal consistency values ranged from .71 to .77. PFAI consists of 25 items and 5 subscales. PFAI subscales's Cronbach Alpha internal consistency values ranged from .54 to .81( only one subcales'

<sup>&</sup>lt;sup>1</sup> Hacettepe University Faculty of Sport Sciences

<sup>&</sup>lt;sup>1</sup> Mersin University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Çukurova University School of Physical Education and Sports

value was below the .70).

Data were analyzed using descriptive statistics, Pearson Products Correlation Coefficient, independent t-test and Multivariate Variance Analysis (MANOVA).

**Results:** Independent t-test were used to test the differences between national athlete and non-national athletes'. Independent t-test revealed that there were no significant differences between national and non-national athletes in MPS subscales and PFAI subscales.

According to results of correlation analysis; there were positively significant relation between Personal Standarts and Fear of Upsetting Important Others (r=282; p< .05). There were positively significant relation among Perceived Parents Pressure and other subscales of PFAI which are Fear of Experiencing Shame and Embarrassment (r= .317; p < .01); Fear of Important Others' Losing Interest (r=231; p<.01) and of Upsetting Important Others (r=350; p< .01). Also positive correlation found between concern over mistakes and all of the subscales of the PFAI.

Also, Two Way Manova were used to determine the effects of gender and being national athletes on perfectionism and performance failure. According to results of Manova, there were no effects of gender and being national athletes on perfectionism and performance failure (Wilk's Lamda= .106; p >.05).

**Conclusion:** It may be concluded that positive significant correlation are present between negative subscales of the perfectionism and performance failure. In other words, negative perfectionists may perceive performance failure more intensely.

Keywords: Perfectionism, Performance Failure, National Athlete

# OP. 631 EFFECT OF COACH BEHAVIORS ON SUCCESS OF DEAF NATIONAL U12 BASKETBALL TEAMS

Berrak F. Fırat<sup>1</sup>, Deniz Durdubaş <sup>1</sup>, Ziya Koruç <sup>1</sup>

#### Abstract

Coach is effective from the discovery of athlete to his/her development, self-confidence and competition ambition (Philippe and Seiler,2006). Therefore, in terms of athlete performance effect, you need to follow and understand relationship between coach and athlete. In their studies, Jowet and Cockerill (2003) emphasized that relationship between coach and athlete has critical importance in order to raise the performance of coach to the best. One of the most important determinant on the quality of relationship between coach and athlete is the behaviors of coach in sports area. These behaviors affect many determinants as satisfaction of the athlete and performance anxiety of athlete (Baker, Cote and Hawes, 2000).

The purpose of this study is to understand how coach behaviors affect the success and anxiety of the deaf athlete during the competition and the relationship between athlete and coach. It targets to understand effects of coach behaviors on athlete and analyze the behaviors of coach in sports area.

Both qualitative and quantitative studies were used in data collection. Prior to first competition, CSAI-2 scale, which is the scale of cognitive anxiety, somatic anxiety and self confidence, was used. Then, anxiety prior to semi-final (SCAT-A), self efficacy and group integrity inventors were used. However, due to fact that sign language was the main language of half of the sportsman and their command of Turkish was weak; qualitative research was required and it contains phenomenological approach related to view of athlete to their trainer supporting quantitative study. Behaviors of the coach and U21 World Championship 2014 men national basketball players during the match were observed for 8 days and they were recorded via video shoot. These recorded behaviors were analyzed then. During this process, semi-structured interviews were carried out one to one with 12 athletes. Information obtained from these interviews were coded in similar themes.

According to findings obtained in this study; positive or negative behaviors of the coach affect the anxiety of athlete. Another finding is that deaf athlete give importance to the communication and the value given by the coach to them. Self confidence and interest of the coach increases the motivation of athlete and the importance given by athlete to competition.

<sup>&</sup>lt;sup>1</sup> Hacettepe University Faculty of Sport Sciences

During the study, in addition to basketball culture, relationship in the deaf community culture has an important place. If the trainer has full knowledge of deaf culture and sign language, it increases the communication with athlete and performance of athlete.

Another important aspect of this study is that it is one of the rare studies made related to Deaf Sport. Deaf Sport contains social minority and a different culture by itself. In order to improve the performances of Deaf athlete and understand deaf sport, studies in this field should be increased.

Keywords: Relationship Between Coach And Athlete; Deaf Athlete; U21 Basketball

### OP. 636 THE EFFECT OF PERSONALITY AND EMOTIONAL INTELLIGENCE ON ATHLETES

Şenol Güven <sup>1</sup>, <u>Serdar Tok</u><sup>2</sup>, Çetin Yaman <sup>2</sup>, Nigar Yaman <sup>3</sup>

- <sup>1</sup> Ministry of National Education Yeniköy Secondary School
- <sup>2</sup> Sakarya University School of Physical Education and Sports
- <sup>3</sup> Bartın University School of Physical Education and Sports

#### **Abstract**

Introduction: Despite the evidences from the other field of psychology showing association amongst personality, Emotional Intelligence (EI) and motor behavior, researchers in the field of sport psychology simply ignored these two construct to understand athletes' psychomotor performance in response to cognitive and emotional stimuli. Therefore, the purpose of the study was to examine the association amongst personality, EI and response speed and accuracy in elite athletes.

Method: Participants were 63 elite athletes ranging in age from 19 to 24. Shutte Emotional Intelligence Scale and short form Five Factors Personality Inventory were used to measure personality and emotional intelligence. Two experiments were conducted to determine athletes' response speed and accuracy to emotional and non-emotional stimuli. In the first experiment, participants viewed positive (30), negative (30) or neutral images (30) selected from International Affective Picture System. Participants' task was to push the corresponding button as fast as possible in response to positive, negative and neutral stimuli. In the second experiment participants were exposured a group of capital letters or three-digit numbers. Numbers and capital letters were appeared for two seconds. The task was to push the corresponding button when an odd number or vowels appear on the screen.

Results: Experiment 1: Pearson corellation analyzes showed that among the personality trait extraversion (r = -.30), agreeableness (r = -.27) and openness to experience (r = -.38) were significantly related to faster responses to positive emotional stimuli. EI dimensions of utilization of emotions (r = -.32) and appraisal of emotions (r = -.35) were also significantly associated with faster responses to positive emotional stimuli. A regression analyses with stepwise method was conducted to determine whether personality traits and EI could predict response speed to positive emotional stimuli. Final model containing only openness and utilization of emotions could explain significant amount of variance in response speed to positive emotional stimuli ( $R^2 = .20$ ; F(2, 56) = 7.24, p = .002).

Experiment 2: None of the EI dimension was associated with response time. However, personality trait agreeableness was related to longer response time to numbers (r= .26). Openness was related to shorter response time to letters (r = -.29). Two stepwise regressions revealed that agreeableness could predict small but yet significant amount of variation in response speed to numbers ( $R^2$  = .07; F(1, 57) = 4.11, p = .005). Similarly openness could predict small but yet significant amount of variation in response speed to letters ( $R^2$  = .09; F(1, 57) = 4.14, p = .002).

Discussion: The main finding of the present study was that extraversion, agreeableness, and openness to experience within the Big Five personality model may have the ability to influence on response speed to positive emotional and non-emotional stimuli. In addition, results also showed that emotional intelligence may also lead faster response speed to emotional stimuli but not non-emotional stimuli. Extraverts' sensitivity to positive emotional stimuli and reward (Gomez, Gomez, & Cooper, 2002) may possibly explain the extraverts' faster response speed to emotional stimuli. Despite the previous results

showing that agreeableness may be associated with slower response time (Burton, et al., 2010; Bresin, et al., 2012), present study demonstrated that agreeableness can lead faster response time in case of positive emotional or cognitive stimuli. Openness to experience has also been found to be associated with response speed to emotional and cognitive speed. Although, openness is related primarily to cognitive, emotional and behavioral constructs (McCrae, & Costa,1997), present study showed that openness may also be related to psychomotor behavior in case appropriate emotional and cognitive conditions.

Keywords: Personality, Emotional Intelligence, Response Speed

### OP. 639 EXAMPLE OF INTANGIBLE CULTURAL HERITAGE OF FAIR PLAY: KIRKPINAR

### Sevda Korkmaz<sup>1</sup>

<sup>1</sup> Marmara University School of Physical Education and Sports

#### **Abstract**

Purpose

In our research, we have aimed to uncover and display the existence and incorporation of fair play elements into the Kırkpınar Wrestling Events, which has been included in UNESCO's list of intangible cultural heritages, and its rituals and applications, and these elements' historical and current effects on the event and the audience.

Method

In our theoretical work, we have researched into credible literary sources in a qualitative manner. By collecting and referring to numerous other works of research, analysis and commentary, the elements of the traditional Kırkpınar oil wrestling have been interpreted in terms of fair play.

Results and Conclusion

Aside from being a leisure activity, sports are meaningful activities that develop individuals physical and mental attributes. This educational and progressive quality of sports depends on its inherent "fair play" feature. In sports, fair play means; honesty in game, following the rules, respect for the opponent, not taking advantage unfairly, discipline, principles, enjoying not only the competition, but the cooperative play with the opponent, and valuing not only winning, but participating.

As the sports equivalent of all the moral and social responsibilities and ethics, fair play is the way to achieve the greatest performance in any sports event. This achievement is possible through following the long standing philosophy and the rules of sports. The traditional Kırkpınar Wrestling events may well be one of the pioneers in sports ethics globally, thanks to its historical roots.

Kırkpınar Oil Wrestling, which largely incorporates rituals, offers a valuable gaze into our societies concept and understanding of sports. For the Turkish people, the field of match is known as the "Er Meydanı" or the "men's field", for that's where the virtues of bravery, fortitude and generousity is displayed.

'Peşrev' may be defined as the entrance into this 'soldiers field'; it is asking for blessing, and embodiment of decency and manners.

And the traditional chants called "cazgir dualari", advise to be brave on the field, holding strenght, wits and mastery not pridefully, but humbly, and advise against insulting the opponent.

The penalties of oil wrestling are reflective of its incorporation of fair play; insulting and cursing the audience, the referee or the opponent; arguing with the opponent during the match; not taking the game seriously, bribing, failing to follow the matches rules, ignoring the calls of the referee.

All of these research findings support that fair play concept is basis of Kırkpınar tradition

Keywords: Fair Play, Cultural Heritage, Kırkpınar

### OP. 646 INVESTIGATION OF RISK FACTORS FOR THE FEMALE ATHLETE TRIAD WITH PSYCHOLOGICAL DIMENSION IN ATHLETES AND NON-ATHLETES

Pınar Öztürk<sup>1</sup>, Yasemin Güzel<sup>1</sup>, Tuğba Nilay Güngör<sup>1</sup>, Ş. Nazan Koşar<sup>1</sup>, Canan Koca<sup>1</sup> Hacettepe University Faculty of Sport Sciences

#### **Abstract**

**Purpose:** The female athlete triad is a syndrome comprising three interrelated health problems (low energy availability, menstrual dysfunction and low bone mineral density). Studies show that eating disorder, one of the risk factors for the female athlete triad, is closely related to the psychological factors such as social physique anxiety and athletic identity. Social physique anxiety is described as the anxiety felt by one who thinks that others have negative evaluations about his/her appearance. In sport context, social physique anxiety can occur among the female athletes to the extent of sport type. Besides it is highly possible that female athletes particularly can develop various eating disorders depending on the levels of their athletic identity. Therefore athletic identity plays an important role in terms of eating disorder in female athletes. On the other hand, according to the studies, this syndrome occurs not only in athletes but also in sedentary and physically active females. In the light of the studies, the aim of this study was to determine the psychological factors such as social physique anxiety and athletic identity in athletes and non-athletes at risk for the female athlete triad.

Methods: A total of 678 female (307 athletes, 371 non-athletes, age range: 12-35 year) participated in this study. Mean ages of non-athletes were 17.87±4.93 and athletes were 17.25±4.48 years. Training years, training frequency and training hours of the athletes were 3.01±1.2 years, 5.61±1.2 d/w, 2.7±1.1 h/d, respectively. %57 of athletes compete in leanness sports (endurance, aesthetic, weight class and antigravitation sports) and of 43% compete in non-leanness sports (technical, ball game and power sports). Firstly, body weight and height measured and body mass index (BMI) was calculated. After this procedure, a detailed questionnaire which comprised of questions about training/physical activity, menstruation, weight control method, stress fracture/low bone mineral density (BMD) history, eating habits were applied. Besides Eating Attitude Test (EAT-40) developed by Garner et al (1982) was employed to evaulate the eating disorder which is one of the risk factors for the female athlete triad. Additionally, Social Physique Anxiety Scale (Hart et al., 1989) to evaulate the social physique anxiety of the participants and Athletic Identity Measurement Scale (AIMS) (Brewer et al., 1993) to evaulate the athletic identity level of females, were used. Descriptive statistics of variables and incidence of female athlete triad risk factors (according to sports) were calculated. In order to determine the relation between variables independent-t test and Pearson Correlation Analyses were performed.

**Results:** Results indicated that 3.9% of the athletes and 3.0% of the non-athletes exhibited all three triad risk factors. It was found that %16,2 of athletes and %15,5 of non-athletes exhibited the risk factor of eating disorder. Besides, there found no significant statistical difference between athletes and non-athletes in terms of having the eating disorder risk factor and social physical anxiety (p = .759, p = .758, respectively). A higher percentage of athletes competing in leanness sports reported low BMI (%7.1; %5.4), disordered eating (%16.3;%14), using pathogenic weight control methods (%19;%14), menstrual dysfunction (%34.8;%25.6) and stress fracture/low BMD (%12.5;%6.2) compared with athletes competing in non-leanness sports. Analysis shows that there is a positive correlation between eating attitudes and body mass index of athletes. As the body mass index increases, risk factor of eating disorder increases (r=0.125; p < 0.05; n=302). However, there is a positive correlation between the eating attitudes, social physical anxiety and athletic identity. According to these findings, as athletes with having higher level of physical appearance disturbance (r=0.433; p < 0.01; n=299) and higher level of athletic identity (r=0.125; p < 0.05; n=277) are more likely to have the eating disorder risk factor. Additionally, there found no significant correlation between the levels of athletic identity and social physical anxiety.

**Conclusion:** In conclusion, there is a positive relation between eating attitudes, social physical anxiety and athletic identity. Moreover, athletes competing in leanness sports were at greater risk of the triad compared with non-leanness athletes.

Keywords: Female Athlete Triad, Social Physical Anxiety, Athletic İdentity

### OP. 652 DO PARENTAL ATTITUDES OF BASKETBALL COACHES EFFECT TO THEIR PERCEPTION OF LEADERSHIP AND LIFE SATISFACTION?

### Turhan Toros<sup>1</sup>

#### **Abstract**

**Aim:** This study aimed to research to parental attitudes of basketball coaches effect to their perception of leadership and life satisfaction or not.

**Method:** 244 men's basketball coaches (Xage:  $35,26 \pm 8,16$ ) was become a participant as a volunteer to this research. Below measurements and the inventory was applied to all participants. The inventory is; Parent attitudes inventory which powered by Kuzgun & Eldeklioğlu (1996). The measurements are; 'Scale of Leadership in Sports' which powered by Chelladurai & Saleh (1978; 1980) and this measurement was adaptated to Turkish athletes by Toros & Tiryaki (2006). 'Scale of Life Satisfaction' which powered by Diener, Emmons, Larsen ve Griffin (1985) and was translated to Turkish by Yetim (1991). Pearson correlation, multi regression analysis and one-way ANOVA were implemented while data analyzing.

**Results:** There are some positive relations occour between parent attitudes points and life satisfaction points. In addition There are some negative relations occour between authoritarian, protective parent attitudes and life satisfaction. According to the relations tested to suitability for regression analysis and modelling. The model created after extraction with variable elimination method, and then this model was analyzed by enter&hierarchical. As the result democratic parent attitudes variables were positive, authoritarian parent class variables were negative. Leadership behaviour was positive effected to life satisfaction in hierarchical regression analysis.

**Conclusion:** Basketball coaches life satisfaction points were determined in high level when examined according to leardership behavior differed.

Keywords: Basketball Coaches, Parental Attitudes, Perception of Leadership, Life Satisfaction, Regression Analysis

# OP.658 RELIABILITY AND VALIDTY OF NEW VERSION OF SPORTS IMAGERY ABILITY QUESTIONNAIRE

Esen Kızıldağ Kale<sup>1</sup>, Ünsal Yetim <sup>2</sup>

#### Abstract

**Purpose:** The purpose of this study was to developed Sports Imagery Ability Questionnaire New Version (SIAQNV) for identify what kind of imagery ability used by athletes.

**Method:** In this study, initially it was decided to adapted Sports Imagery Ability Questionnaire-SIAQ which was developed by Williams and Cumming (2011) and consisting 15 items and five subscales in order to evaluate athletes' imagery ability. But as a result of the factor analysis it was decide that this questionnaire can not be used for the Turkish population. A new sports imagery ability questionnaire was decided to develop that imagery ability of athletes could be changed by one culture to another due to cultural adaptation, perceptual differences and the characteristics of the athletes in the country.

**Results:** Voluntered 283 athletes, who were 180 males (Age: 21.35± 3.77years; Sport age: 8.04±3.76years) and 103 females (Age: 21.2±3.97years; Sport Age: 8.58±4.10years) totally from 3 different sports (athletics, handball, football), were participated to this questionnaire. The questionnaire consists of 5 subscales and 25 items. As results of principle component factor analysis, Ouestionnaire's subscales were found with Strategy Imagery (4 items), Ability Imagery (6 items),

<sup>&</sup>lt;sup>1</sup> Mersin University School of Physical Education and Sports

<sup>&</sup>lt;sup>1</sup> Eskişehir Sport Club

<sup>&</sup>lt;sup>2</sup> Mersin University Faculty of Letters Department of Psychology

Goal Imagery (6 items), Emotion Imagery (5 items), and Mastery Imagery (4 items). Cronbach's Alpha internal consistency coefficients were .84 for Strategy Imagery, .86 for Ability Imagery, .78 for Goal Imagery, .80 for Emotion Imagery and .71 for Mastery Imagery, and .92 for SIAQNV.

After Explanatory Factor Analysis (EFA) revealed five factor, Confirmatory Factor Analysis (CFA) was applied to the questionnaire. As a result of confirmatory factor analysis  $\chi 2$  / sd, RMSEA, CFI, NNF, RMR, NFI, GFI and AGFI fit indices were examined. RMSEA, CFI, NNF, RM, NF adequate and good value while meeting compliance criteria; GFI and AGFI values obtained for the acceptable limit in the case of adaptation.

**Conclusion:** These findings has been seen as satisfactory for the subscales of SIAQNV and SIAQNV would be used for Turkish athletes.

Keywords: Imagery Ability, Reliability, Validity

#### OP. 676 THE ALIENATION OF FEMALE ATHLETES

### Neslihan Filiz<sup>1</sup>

<sup>1</sup> Marmara University School of Physical Education and Sports

#### **Abstract**

Aim

Philosophically analyzing the alienation of female athletes.

#### Method

Literature review is used.

#### **Findings and Conclusion**

The strive for "excellence" of athletes that aims a human being to have the best possible physical development and performance when having the duty of representing the humanity leads female athletes also to push her limits to reach the "super-woman" image. Besides, female athletes feeling the oppression of gender roles (especially; being a wife and a mother), tends to promote her presence in the male-dominated sports world by her traditional roles of "women". On the other hand, she is been alienated by the mass media by being shown both a traditional woman and a aesthetic object. Within the context of gender roles in the society, women and men are generally described by their "other". Therefore, a woman is that is not a man; a man that is not a woman. The "feminine apologetic" is a common practice among female athletes whereby aspects of their femininity are exaggerated to compensate or apologize for their presence in a masculine domain (Bell, 2008, s.47)". For example; a female bodybuilder gets breast implants not to "look like a man"; a female basketball player puts on make up while playing, to be called as a "feminine woman" at the court as well. All that jazz causes female athletes to obey the present alienation process by their efforts to comply with the traditional roles of women and idealized body images of female athletes.

While especially using of drugs, applying sex tests, regulating sexual practices in sports serve changing gender ideologies; they tends to protect idealized excellent body (Koca & Bulgu, 2005, p.170). Female body should protect her excellence in defined limits. However, this alienates female athletes by seeing them as aesthetic objects.

Hence, both in Turkish and English, sex-oriented terms like 'sportsman' and 'sportsmanship' are commonly used. However, recently, the term 'sportsperson' has begun to be used. We can infer that this new term can eliminate the alienation of female athletes, at least, within the use of language.

Are the female athletes are accepted to play as themselves? As far as the female athletes are described by their bodies and through gender roles, they are not accepted to play as athletes but women athletes. Finally, the sense of gender roles does not allow a female human being to represent the humanity, but the womanhood. That can be clearly observed by looking into the use of language in the mass media that is not been clearly criticized.

Keywords: Female Athlete, Alienation, Mass Media, Aesthetic Object, Sportsperson

# OP. 685 THE EFFECT OF IMAGERY INTERVENTIONS ON IMAGERY ABILITY IN ELITE ATHLETES

Esen Kızıldağ Kale<sup>1</sup>, Ünsal Yetim <sup>2</sup>

#### **Abstract**

**Purpose:** The purpose of this study was to examine the effect of imagery interventions on imagery ability of elite athletes.

Method: This study was designed as a pre-test, mid- test and post-test and semi-experimental research design was used. Voluntered 40 athletes (18 men, 22 women) at the national level who were older than 18 years, continue active sports life and never experienced injuries in recent years were participated to this study. They were divided in 2 groups [Experimental Group (n= 20) (Age: 24.40±4.50 years; Sport age: 10.15±4.27 years)] and Control Group (n= 20) (Age: 22.30±3.26 years; Sport age: 9.55±2.94 years)]. Participate in the study was based on volunteerism and voluntary participation form was signed volunteers that they have agreed to participate in the study. In the study, imagery intervention program was prepared that utilize various sources used in sport and exercise areas. This program was prepared by utilizing from Suinn's (1976) Visuomotor Behavior Preparation, which was widely used in sports. Imagery intervention program was performed to athletes 3 days in a week for 30- 45 minutes in a day and the program took 12 weeks. In this study, both experimental and control groups were applied Sport Imagery Ability Questionnaire New Form (SIAQNF) which was developed by Kale and Yetim (2013) in the beginning, middle and end of the intervention program. SIAQNF consists of 25 items and five subscales. Split Plot ANOVA were used to data obtained from this study.

**Results:** Analyses of Split Plot ANOVA indicated that intervention programs increased ability imagery [F(2, 76) = 7.234, p = 0.002], strategy imagery [F(2, 76) = 12.071, p = 0.000], goal imagery [F(2, 76) = 5.056, p = 0.010], emotion imagery [F(2, 76) = 6.142, p = 0.004] and mastery imagery [F(2, 76) = 9.032, p = 0.000].

**Conclusion:** These results showed that intervention programs effects on imagery ability variable. In conclusion, imagery intervention programs should be used as a part of training due to contribution of athletes' performance development.

Keywords: Imagery Intervention Program, Ability Imagery, Strategy Imagery, Goal Imagery, Emotion Imagery, Mastery Imagery

<sup>&</sup>lt;sup>1</sup> Eskişehir Sport Club

<sup>&</sup>lt;sup>2</sup> Mersin University Fen Faculty of Arts/Department of Psychology

### OP. 51 EVALUATION OF PHYSICAL ACTIVITY AND FITNESS LEVELS OF 14-18 AGE GROUP GIRL AND BOY STUDENTS HOUSING IN KONYA ORPHANAGES

Musa Uçar <sup>1</sup>, <u>İ. Bülent Fişekçioğlu</u><sup>2</sup>

#### **Abstract**

**Aim:** The aim of this study is to contribute legal regulations of the functioning of orphanages accompanied by findings made to determine physical activity and physical fitness levels of adolescents residing in orphanages including the evaluation of the health status of adolescents and the work done for the protection of their health.

Material and Methods: The study population involves 90 adolescents (n = 39 female, n = 51 males) housing in Konya Orphanage. The scale was applied in the staff room of the orphanage for determining the physical activity level of the adolescents involved in the study after necessory explanation was given under the supervision of the researcher. The measurement for determining the physical convenience level has been done towards relevant test protocol by paying attention that the participants were not tired in the gym of orphanage. Adolescents Physical Activity levels was evaluated by Physical Activity Scale (PAQ-A) Turkish version of the scale of Questionnare for Adolescents (PAQ-A) developed by Crocker for the validation and reliability. Fitnessgram Test battery developed by The Cooper Institute was used in determining the level of physical fitness of adolescents. Descriptive statistics concerning demographic physical and physiologic features were calculated with the aim of providing information about the adolescents who take part in the study.

**Results:** In the Assessment Standards of The Cooper Institute Fitnessgram Test Battery (2010), 78.43% of the boys (n = 40), 82.05% of girls (n = 32) couldn't reach minimum values specified for age and gender in at least one of tests for determining the physical fitness of the components. According to The Cooper Institute Fitnessgram Test Battery Assessment Standards (2010) aerobic fitness for (estimated MaxVo<sub>2</sub> ml / kg / min values), 18.9% (n = 17) of adolescents have risks in terms of health, 22.2% (n = 20) need to improve aerobic fitness, 58.9% (n = 53) are perceived to be adequate in terms of health; in terms of body composition (according to the values of BMI) 4.4% (n = 4) of adolescents have risks in terms of health, 16.7% (n = 15) should improve BMI values and 78.9% (n = 71) are found to be sufficient in terms of health. According to gender in terms of some anthropometric and physiological (height, BMI, and MaxVo<sub>2</sub> values) features, it was observed that there was a significant difference in favor of males (p <0.05); and in terms of the flexibility of the body and lower ekstrimite (sitting access test values), and physical activity level, there is a significant difference in favor of girls was observed (p <0.05). It is understood that 51.1% (n = 46) of adolescents who participated in the study were inactive, 32.2% (n = 29) were moderately active, 16.7% (n = 15) were found to be active.

Conclusion: As a result, it is observed that inactivity is common among the adolescents (especially men) in orphanages, adolescents' physical fitness levels are not enough, and they have risks in terms of health. In case of an increase in physical activity levels of adolescents, there can be an increase in physical fitness levels and consequently there is a decrease expected in the number of people having the risk of health. Therefore it is thought that necessary legal arrangements for the improvement of sports fields in orphanages and organizing recreational activities, causes an increase in physical activity levels of adolescents, and has a contribution for development, protection of physical fitness levels, and leading them to have healthier life. These trainings under the guidance of coaches and physical education teachers working in orphanages and the contents of physical education classes in schools, should be thought to be as dense and functional as to improve the physical fitness components. These trainings are thought to include exercises especially improving flexibility with aerobic fitness and contribute body composition to reach the ideal value in terms of age and gender of the qualities.

Keywords: Extrimity, Physical Activity, Physical Fitness, Inactivity, Orphanage

<sup>&</sup>lt;sup>1</sup> Ministry of National Education Konya Meram Ahmet Naci Gücüyener Primary School

<sup>&</sup>lt;sup>2</sup> Selcuk University School of Physical Education and Sports

# OP. 125 THE EFFECT OF BIRTH WEIGHT ON SOME PHYSICAL FITNESS PARAMETERS OF 8-TO10- YEAR- OLD CHILDREN

Gökmen Özen<sup>1</sup>, Muhammed Emin Kafkas <sup>2</sup>

#### **Abstract**

**Introduction:** The concept of physical fitness is a matter of fact that gives direction to our lives and important in the every period of our lives in terms of health. Especially, for a healthy life during adulthood, it's very important that identifying the factors effect on physical fitness and indirectly health in the early years of life and childhood. In this context, the aim of current study is to investigate the effect of birth weight on some physical fitness parameters of 8-to10- year-old children.

**Materials and Method**: The sample consisted of a total of 180 both gender children who living in the central district of Malatya between 8 and 10 years old. According to intrauterine growth curves, children who had low (n=60), normal (n=60) and high birth weight (n=60) joined the research as voluntarily. In the research, some anthropometric measurement (height, weight and BMI) and Eurofit test battery (flamingo balance, plate tapping, sit and reach, standing long jump, handgrip strength, 30 s curl-ups, bent-arm hang and 10x5 m shuttle run tests) were performed to participants.

**Results:** In the study, anthropometric measurements and physical fitness parameters were measured by Eurofit Test Battery of the volunteers who had low, normal and high weight according to the birth weight were examined. According to birth weight among groups were found not significant difference statistically in all anthropometric measurements; height, weight and BMI and scores of Eurofit Test Battery; flamingo balance, plate tapping, sit and reach, standing long jump, handgrip strength, 30 s curl-ups, bent-arm hang and 10x5 m shuttle run tests (p>0.05).

**Conclusion:** Based on the information obtained from the sample of present research, in the 8-to10-aged children have been found made no major effect of only birth weight on anthropometric characteristics (height, weight, BMI) and physical fitness parameters (balance, limb speed, muscular endurance, static the dynamic strength, flexibility, speed, coordination).

Keywords: Physical Fitness, Birth Weight, Eurofit, Performance

### OP. 154 EFFECTS OF CREATINE SUPPLEMENTATION AND RESISTANCE TRAINING ON MUSCULAR STRENGTH AND BODY COMPOSITION IN COLLEGIATE ATHLETES

Amin Azımkhanı<sup>1</sup>, Yaser Garazhian<sup>2</sup>, Amir Moghaddam<sup>3</sup>, Sadegh Abbasiyan<sup>4</sup>, Zahra Sayevand <sup>5</sup>

#### Abstract

**Objectives:** The aim of study was to examine the effects of 6 wk of oral creatine supplementation during a periodized program of strength training on arm flexor, bench press and squat 1RM, and body composition.

**Methods:** Eighteen college athletes volunteers with at least 1 year of weight training experience randomly assigned to two groups of creatine(Cr, n=9) and placebo(P, n=9) with no significant mean at pretest measures. Cr group received 20 g.d<sup>-1</sup> of creatine for the first 6 d in 5-g doses, four times daily,

<sup>&</sup>lt;sup>1</sup> İnönü University Institute of Health Sciences Department of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> İnönü University School of Physical Education and Sports

<sup>&</sup>lt;sup>1</sup> Imam Reza International University of Mashhad Physical Education and Sport Sciences

<sup>&</sup>lt;sup>2</sup> Sport Science Research Center Mashhad Physical Education and Sport Sciences

<sup>&</sup>lt;sup>3</sup> Mashhad Branch Islamic Azad University Mashhad Department of Physical Education and Sport Sciences

<sup>&</sup>lt;sup>4</sup> University of Tehran Faculty of Physical Education and Sport Sciences

<sup>&</sup>lt;sup>5</sup> Malayer Branch Islamic Azad University Malayer Physical Education and Sport Sciences

followed by 5 g.d<sup>-1</sup> for reminder of the study. Each 5-g dose was mixed with 500 mL of glucose solution. The P group received a placebo (starched, sucrose drink) following the exact protocol as the Cr group. All subjects' resistance trained 3 d.Wk<sup>-1</sup>. Measurement of 1RM strength of arm flexors, bench press, and squat and body composition were made pre- and post-training after supplementation while monitoring dietary intakes.

**Results:** Results showed body mass and lean tissue mass increased to a greater extent with training in Cr compared to placebo group (p< 0.05). There were no significant changes in percent body fat for either group. Cr group demonstrated greater improvement in 1RM of squat, bench press and arm flexors than placebo group.

**Conclusions:** These data suggest that creatine supplementation during strength training may be superior to training alone for enhancing muscular strength and body composition.

Keywords: Ergogenic Aids, Weight Training, Creatine Monohydrate

# OP. 180 THE RESEARCH OF THE EFFECTS OF PLATES EXERCISE PROGRAM ON FLEXIBILITY AND BODY COMPOSITION

Hakan Yapıcı <sup>1</sup>, Sinan Ayan <sup>1</sup>, Mehmet Ulas <sup>1</sup>

#### Abstract

**Introduction:** In the study, 12-week pilates exercise program implemented to 24 volunteer-female students who had no health problem and did not attend to a regular exercise program. An the effects of it on flexibility and body composition was researched

**Material and Method:** 24 sedentary females (age: 21,2±1,2, weight: 67.3±9.83 kg, height: 1.63±0.1 cm) attended to the study. The exercise program was limited to 12 weeks, and weight, height, body mess index values, some anthropometric circumference measurements and body oil rates were observed before and after the program. Dexa body analyse device was used for the measurements

**Findings:** In the study, it was observed that flexibility and some circumference measurements could be developed by pilates exercises. Meaningful developments on all the flexibility values (sit and lie test) and circumference measurements (leg, chest, stomach, waist, arm circumference) were observed on the samples with the help of this 12-week exercise program.

**Result:** In the study, positive changes were observed on all the parameters for the body composition of samples by 12 week exercise program and the body flexibility developed. As a result, it has been concluded that the exercise program formed in terms of development of physical fitness has positive effects on body composition and flexibility.

Keywords: Female, Pilates, Flexibility, Exercise

# OP. 251 DETERMINATION AND COMPARISION OF ADULT SPRINTERS AND DISTANCE RUNNERS' NUTRITION KNOWLEDGE

Murat Bıyıklı<sup>1</sup>, Aysel Pehlivan<sup>1</sup>

#### Abstract

Purpose: Determining whether a diffirence exists between distance runners' and sprinters' level of nutrition knowledge.

Method: The research is performed on 15 distance runners and 15 sprinters, in total of 30 volunteer males, who are still actively engaged in sports individually or in Turkey National Team. A reliability and validity ensured nutrition knowledge questionnaire is applied to the athletes, and it consists of three parts. 1st part consists of questions about personal knowledge, 2nd part consists of questions

<sup>&</sup>lt;sup>1</sup> Kırıkkale University School of Physical Education and Sports

<sup>&</sup>lt;sup>1</sup> Marmara University School of Physical Education and Sports

about personal habits, and  $3^{rd}$  part consists of questions relating to measuring the level of nutrition knowledge.

Findings: In research, it is investigated whether or not being a national athlete affects the level of nutrition knowledge, and the result is found statistically insignificant. (p>0,05)

A statistically insignificant difference is determined between the athletes those received nutrition education and those not received it in their academic life. (p>0,05)

In research, the athletes' income level is investigated, and a statistically insignificant difference is determined between the income levels and nutrition knowledge of athletes. (p>0,05)

When the athletes' nutrition knowledge is evaluated in terms of age variable, a statistically insignificant difference is determined between the athletes' age and their nutrition knowledge. (p>0,05) When athletes' habits are evaluated, the presence of habits that affects athletes' performance negatively such as alcohol and cigarette is determined.

The link between blood groups and dietary patterns is investigated and no significant relationship is found, however it is tested with analysis of variance whether or not athletes' branches differ according to their blood groups, and the value of 3,786 F (p<0,05) is observed statistically significant.

Result: When distance runners and sprinters' nutrition knowledge is compared, it is determined that the result is statistically insignificant. (p>0,05)

It is appointed that athletes have a medium level of knowledge about recognition of nutrients.

In the education of athletes, it is suggested to focus more on effectively consumption of nutrients and performance of athletes. Especially, the substances contained in nutrients, and the relationship between nutrition and performance of athletes is suggested to take place in education curriculum.

Keywords: The Nutrition of Athletes, Level of Nutrition Knowledge, Blood Group

# OP. 281 RELATIONSHIP BETWEEN PHYSICAL ACTIVITY LEVELS AND PHYSICAL FITNESS OF YOUNG (15-17 AGES)

Nesrin Sayın<sup>1</sup>, Adem Civan <sup>1</sup>

#### **Abstract**

Aim: Research the relationship between physical activity levels and physical fitness of young (15-17 ages)

Method:100 girls and 100 boys of ages 15, 16 and 17 having no physical disorder participated to this study voluntarily. Physical activity levels were determined by application of International Physical Activity Questionnaire to the participants. Walking, moderate intensity and vigorous physical activity duration and frequency were questioned and recorded by International Physical Activity Questionnaire. Then total Metabolic Equivalent (MET) scores were calculated in MET-min/week. Accordingly, physical activity levels of participants were classified as inactive, minimal active or very active.

Physical fitness tests were applied to measure physical fitness of the participants. V sit and reach test for flexibility, 30 seconds sit-up test for muscular strength and endurance, 20 meters sprint run test for speed, 1 mile run and walk test for cardiovascular endurance, standing long jump and medicine ball throw tests for quick strength were applied to the participants.

Findings: Average ages of participants in this study were calculated as 15,92±0,84 years for 100 girls and 15,99±0,81 years for 100 boys.

Average MET scores of participant girls were determined as 1926,60±1220,34 MET-min/week for total MET, 610,48±738,96 MET-min/week for vigorous activity, 607,71±514,86 MET-min/week for moderate intensity activity, 671,76±588,58 MET-min/week for walking. Average MET scores of participant boys were determined as 3856,94±1894,78 MET-min/week for total MET, 2292,47±1621,67 MET-min/week for vigorous activity, 739,71±486,90 MET-min/week for moderate intensity activity, 755,98±486,90 MET-min/week for walking.

When MET scores of girls were evaluated, it was found that MET scores tended to decrease as the age

<sup>&</sup>lt;sup>1</sup> Selcuk University School of Physical Education and Sports

increased except for moderate intensity activity. When MET scores of boys were evaluated, it was found that total and vigorous activity MET scores decreased but walking MET score increased decrease as the age increased.

Generally, physical fitness test results show that all test scores of participant boys are higher than participant girls as expected. It was observed that flexibility, quick strength and endurance parameters decreased for girls, quick strength and speed parameters increased positively but flexibility parameter decreased for boys as the age increased for both groups.

While reviewing the relationship between physical activity levels and physical fitness of participant girls, relation between total MET score and medicine ball throw (r=0,318;p<0,05), 1 mile run and walk (r=-0,209;p<0,05) and Body Mass Index (BMI) (r=0,265;p<0,05) was determined. Additionally, relation between vigorous activity and medicine ball throw (r=0,334;p<0,05), 20 m run (r=0,262;p<0,05) and BMI (r=0,235;p<0,05) was determined. Relation between moderate intensity activity and medicine ball throw (r=0,237;p<0,05) and BMI (r=0,244;p<0,05) was determined. Walking and 1 mile run and walk activity were also

While reviewing the relationship between physical activity levels and physical fitness of participant boys, relation between total MET score and medicine ball throw (r=0,314;p<0,05), 1 mile run and walk (r=-0,214;p<0,05) and BMI (r=0,258;p<0,05) was determined. Additionally, relation between vigorous activity and medicine ball throw (r=0,265;p<0,05), 1 mile run and walk (r=-0,225;p<0,05) was determined. Relation between Moderate intensity activity and BMI (r=0,223;p<0,05) was determined. Relation between walking and flexibility (r=0,232;p<0,05), medicine ball throw (r=0,213;p<0,05) and BMI (r=0,197;p<0,05) was also determined.

Conclusion: When participants were classified as very active, minimal active and inactive it was found that most of the participant boys (%61) were very active, most of the participant girls (%73) were minimal active and accordingly, boys were physically more active than girls. When physical activity levels were reviewed in accordance with the age, it was concluded that physical activity levels decreased as the age increased for both gender groups.

When physical fitness tests were reviewed, it was found that participant boys performed better than participant girls as expected, except for flexibility test. Additionally, flexibility, speed, quick strength and endurance parameters decreased for girls as the age increased. Quick strength and speed parameters increased but flexibility parameter decreased for boys as the age increased.

When relation between physical activity levels and physical fitness parameters were reviewed, it was determined that physical activity levels in different intensities were correlated with endurance, speed, quick strength parameters and BMI. These results show that physical activity level and physical fitness are correlated.

Keywords: Physical Activity Level, Physical Fitness, International Physical Activity Questionnaire, Physical Fitness Test, Youth

# OP. 282 THE RELATIONSHIP BETWEEN PHYSIOLOGICAL CHARACTERISTICS IN ELITE FEMALE YOUTH SOCCER

### Kemal Idrizović<sup>1</sup>

<sup>1</sup> University of Montenegro Faculty For Sport and Physical Education

#### **Abstract**

The aim of this research was to estimate the mutual relationship, correlation of physiological characteristics, aerobic power, speed endurance, start acceleration, agility and explosive strength in elite youth female soccer. The sample of female examinees for this research was made of 27 female players of U19 Montenegrin national team, except for goalkeeper's participation because of a significantly different profile of the position of this player which would influence the final results of this research. The testing was carried out during a regular gathering of players of the national team in the period of winter pause in the season 2012/2013. The listed physiological characteristics were tested by the following tests: Yo Yo intermittent recovery test, (level 1), sprint 10 m from standing

start, zig-zag, 300 yards and countermovement jump. By a correlation analyse it was ascertained that mutually statistically significantly correlate tests Yo Yo intermittent recovery test, (level 1) and 10 m sprint (r=-.672, p=.000), then Yo Yo intermittent recovery test, (level 1) and test Zig-Zag (r=-.552, p=.003) and Yo Yo intermittent recovery test, (level 1) and test 300 yards (r=-.780, p=.000). Test for assessement start acceleration, 10 m sprint, shows statistically significant correlation with test zig-zag (r=.650, p=.000) and 300 yards (r=.596, p=.001). Regarding to zig-zag test, significant correlations were found with countermovement jump test (r=-.471, p=.013) and 300 yards (r=.524, p=.005). The conclusion of this research is that elite youth female soccer players with high potentials of a aerobic power also have high level of speed endurance, starting speed and agility, while on the other side, elite youth female soccer players with the highest level of explosive strength have the highest level of agility.

Keywords: Physiological Characteristics, Correlation, Female Soccer

### OP. 284 THE COMPARISON OF EXERCISE TRAINING AND METHADONE SUPPLEMENT ON SELECTED INDEXES IN MAN SUBJECTS

Amin Azimkhani<sup>1</sup>, Sadegh Abbasian <sup>2</sup>, Seyyed Reza Attarzadeh <sup>3</sup>, Samane Abbasian <sup>4</sup>

- <sup>1</sup> İmam Reza Internation University of Mashhad Physical Education and Sport Sciences
- <sup>2</sup> Tehran University Faculty of Physical Education and Sport Sciences
- <sup>3</sup> Ferdowsi University of Mashhad Faculty of Physical Education and Sport Sciences

#### Abstract

**Objectives**: The purpose of this study was to determination of relationship between beta- endorphin (BEND) levels and hypoalgesia in addict men.

**Methods**: 20 male addicts to 20-33 years old randomly was selected as a public call and after it was divided into drug supplement (N=10) and exercise - drug supplement (N=10) groups. While the first group daily would to do consumption 10 mg methadone; the exercise - drug supplement group was performed exercise training to intensity of 70-75 percent of VO2max for 20 sessions (5 sessions per week and for 45 to 55 minutes in each session) in addition to intervention of drug supplement group. Finally, use SPSS for data analyze in the level of p < 0/05.

**Results**: In exercise-drug supplement group was shown significant negative relationship between BEND levels and hypoalgesia due to ischemic pain, mechanical pain and pain due to decrease and increase of temperature (P<0.05).

**Conclusion**: We can deduction that presumably method of exercise-drug supplement is a better for treatment of addict men. In also, it is a good method for enhance of body's systems of addict men.

Keywords: Methadone Supplement, Beta-Endorphin, Exercise Training

#### OP. 317 PHYSICAL FITNESS EVALUATION OF THE TURKISH ARMED FORCES

Yetkin Utku Kamuk<sup>1</sup>, Kemal Tamer <sup>2</sup>

- <sup>1</sup> Hitit University School of Physical Education and Sports
- <sup>2</sup> Gazi University School of Physical Education and Sports

#### **Abstract**

Aim: The purpose of this study was to investigate the current physical fitness tests in the Turkish Armed Forces and create new evaluation charts for different groups based on age, service and combat/non-combat status.

<sup>&</sup>lt;sup>4</sup> Shahroud University Faculty of Medicine Sciences

Method: In this study, 3.675 healthy male subjects, aged 19-58, in service were randomly selected. The subject group comprised personnel from all four services in the TAF. To collect data, subjects were asked to participate in aerobic fitness, muscular fitness, agility, coordination, flexibility and body composition tests. The statistical methods used in this investigation were descriptive statistics, Student's t-Test, ANOVA, and post-hoc tests (Scheffe and Games-Howell). The predetermined significance level was 0.05.

Findings: As a result of this study;

- 1. A significant difference was found between age groups. Although muscular fitness showed an increase in average scores by the age of 30, all other tests were negatively affected as the age level increased.
- 2. In most of the test items, there was no significance between the services. The performance levels of the subjects were found to be homogeneous, except the chin-up and 3.000 m run tests.
- 3. There was a significant difference between the combatant and non-combatant subjects' physical performances. Combatant subjects showed a better performance in all the test items than did their non-combatant counterparts.
- 4. The results of the body composition assessment and the statistics applied showed that the normal subjects' performances were better than the overweight and obese subjects' performances. Also, as the level of obesity increased, higher degrees of deterioration in performances were observed.

Result: It was concluded that the current fitness level of the army personnel should be promoted by taking some necessary administrative measures that are vitally important for both the national security and personal health of the army personnel.

Keywords: Tuskish Army, Fitness, Physical Readiness Test, Military Fitness

### OP. 322 FEMALE PRESERVICE TEACHERS' PHYSICAL ACTIVITY PARTICIPATION HABITS

Sonnur Küçük Kılıç<sup>1</sup>, <u>Nurgül Keskin</u><sup>1</sup>, Serdar Alemdağ<sup>1</sup>, Erman Öncü<sup>1</sup>

#### Abstract

#### **Objective**

Doing regular physical exercise helps preserving and improving physical health besides its psychological benefits (Artal and Sherman, 1998). In addition to its positive effect on their life quality, having regular exercise habits is especially important for the female preservice physical education teachers as they will be the role models for the young individuals in the roles of mother and teacher. In this context, the purpose of this study was to determine the female preservice teachers' physical activity participation habits and to examine these habits according to some demographic variables.

#### Methods

The study was conducted on 894 female preservice teachers ( $M_{Age}$ =20.83) who were enrolled in three programs (Physical Education and Sport Teaching-PEST, Early Childhood Teaching-ECT, Elementary Teaching-ET) at Karadeniz Technical University in 2013-2014 Spring Semester. As the data collection tool, Exercise Stages of Change Questionnaire (ESCQ) was administered on the participants in the study. The ESCQ was first developed by Marcus and Lewis (2003) in order to determine exercise behavior stages of individuals and it was translated into Turkish by Cengiz, Aşçı and İnce (2010). The scale was consisted of 4 items and all items were answered in the forms of 'Yes' or 'No'. Individuals were divided into five stages (Precontemplation, Contemplation, Preparation, Action and Maintenance) according to their answers. Chi-Square Test ( $\chi^2$ ) was used in the data

Action and Maintenance) according to their answers. Chi-Square Test ( $\chi^2$ ) was used in the data analysis.

#### Results

The study showed that whereas %21.48 of the participants were in the *Precontemplation* stage, %21.14 of the participants were in the *Contemplation* stage, %23.71 of the participants were in the *Preparation* stage, %10.96 of the participants were in the *Action* stage and %22.71 of the

<sup>&</sup>lt;sup>1</sup> Karadeniz Technical University School of Physical Education and Sports

participants were in the *Maintenance* stage. The results of  $\chi^2$  test indicated that the difference between the stages was statistically significant ( $\chi^2$ =47.51, p=0.00). The percentile distribution of the freshmen, sophomores, juniors and seniors were as follows, respectively. In the Precontemplation stage, the ratios were %20.9, %16.9, %20.6 and %30.8, the percentages at Contemplation stage were %26.0, %13.1, %20.3 and %24.8, those who were placed in the Preparation stage were %21.7, %29.5, %23.1 and %21.1 according to their levels, and the distribution of different classes in the Action stage was %11.2, %10.9, %12.5 and %6.8, and finally the distribution for the *Maintenance* stage was %20.2, %29.5, %23.4 and %16.5. According to the result of  $\chi^2$  test, there was significant difference between stages in respect to the years spent at the university ( $\chi^2=29.77$ , p=0.00). The distribution ratio of the participants who studied at the departments of PEST, ECT and ET for the Precontemplation stage were %12.4, %21.7 and %23.3, for the Contemplation stage it was %12.4, %24.2 and %20.6, for the *Preparation* stage the ratios were %14.4, %26.2 and %23.8, the percentile distribution was %9.3, %13.0 and %9.7 for the Action stage, and %51.5, %14.9 and %22.6 for the *Maintenance* stage. The results of  $\chi^2$  test indicated that the difference between the stages was statistically significant ( $\chi^2$ =61.22, p=0.00) according to the program of study. The percentile distribution according to the variable of having a suitable exercise environment or not were as follows: for the Precontemplation stage the percentages were %18.6 and %28.9, for the Contemplation stage it was %20.2 and %23.7, for the Preparation stage it was %25.6 and %18.9, for the Action stage it was %11.3 and %10.0, and for the Maintenance stage the percentages were %24.3 and %18.5. The results of  $\gamma^2$  test indicated that the difference between the stages was statistically significant ( $\gamma^2=16.37$ , p=0.00) according to independent variable of having a suitable exercise venue nearby.

#### Conclusion

Results of the study revealed that women preservice teacher were mostly at the *Preparation* stage, and then at the *Maintenance* stage, at the *Precontemplation* stage, at the *Contemplation* stage, and the *Action* stage, in a descending order. There was significant difference in the scores of the participants' exercise behavior stages according to the independent variables of years of study at the university, program of study and suitable exercise environment According to this result, it can be said that all three variables are determining variables affecting the exercise behavior stages of participants. Also, it was a result noteworthy that students who were at their final year at the university were mostly at the *Precontemplation* stage.

Keywords: Exercise, Physical activity, Female Teacher Candidate

# OP. 328 RELATION OF 2D:4D RATIO WITH PERFORMANCE OF AMATEUR BASKETBALL PLAYERS

Dursun Güler <sup>1</sup>, <u>Burak Özdemir</u><sup>2</sup>, Alican Bolat <sup>3</sup>, Görkem Yücegönül <sup>3</sup>, Taylan Özdemir <sup>3</sup>

- <sup>1</sup> Amasya University Faculty of Education Department of Physical Education and Sports
- $^{2}$  Amasya University Institute of Social Sciences
- $^{3}$  Amasya University Faculty of Education Department of Physical Education and Sports

### **Abstract**

#### **Purpose**

This study was done in order to find out the relation between 2D:4D ratio and sportive skills of amateur basketball players.

### Method

Study was carried out in Amasya, on 56 amateur male basketball players aged between 10 and 18. In order to collect the data, right hand 2D and 4D length and ratio, body height, weight, vertical jump height, 10 metres sprint, push-up, 20 metres crunch run values are taken and evaluated.

Evaluating the data, standard deviation, average, minimum and maximum values were taken into

consideration; and finding out the relation between sportive skills and digit ratio, correlation and  $X^2$  tests were applied.

### **Findings**

It is found out that, although there is positive relation (p<0,05) between 2D:4D ratio and 10 meter sprint in our sample, there is no relation with other skills.

#### Result

It can be said that, the more the 2D:4D ratio of the amateur basketball players, the faster they can be in sprint.

Keywords: School Age Children, Relation 2D:4D Ratio, Sporty Performance

### OP. 337 EFFECT OF SINGLE-HIGH DOSE NANDROLONE USED AS DOPING AGENT PLASMA CORTICOSTERONE CONCENTRATION IN RATS

Erdal Taşgın<sup>1</sup>, Hale Ergin<sup>2</sup>, Seyfullah Haliloğlu<sup>2</sup>, Şerife Kezban Dilber<sup>3</sup>

#### **Abstract**

**Aim:** This study was carried out to investigate the effects of a single high dose of nandrolone decanoate on plasma corticosterone levels in rats.

Material and Methods: Totally, 36 rats in each group, including male and female nandrolone groups (EN and DN) and the male and female control groups (EC and DK) was created. In order to determine the initial corticosterone levels (0 h) in male and female rats were used in six of them. The remaining rats in the trial group in the morning at 8:00 intraperitoneally 40 mg/kg were injected with nandrolone decanoate. Control groups were injected with an equal amount of peanut oil. Followed by injections, at 1, 2, 4, 8, 12 hours, all the rats were anaesthetized with ketamine plus xylazine. Blood was taken from the hearts of rats. Plasma corticosterone levels were determined by ELISA.

**Results:** Considering the hourly changes in corticosterone levels, corticosterone levels in the first hour increase in the EN group were determined. Such an increase is determined in female rats. In addition, the initial corticosterone levels to be high in females than males, this difference is relatively disappear later continued high levels of the females.

**Conclusions:** As a result, the application of a single, high-dose nandrolone decanoate to male and female rats effected the levels of corticosterone. To the understanding of the effects nandrolone decanoate to hypothalamic-pituitary-adrenal axis, ACTH, and other stress markers should be considered to determine. In addition, the phases of the female sexual cycle, taking into account that there is need for new studies suggest that large-scale.

Keywords: Nandrolone Decanoate, Corticosterone, Rats

<sup>&</sup>lt;sup>1</sup> Selçuk University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Selçuk University Faculty of Veterinary Medicine Department of Biochemistry

<sup>&</sup>lt;sup>3</sup> Selçuk University Institute of Health Sciences

# OP. 351 THE MORPHOMETRIC EFFECTS OF NANDROLONE DECONATE USED AS DOPING AGENT TREATMENT ON THE ADRENAL ZONES OF MALE AND FEMALE RATS

Gökhan Cüce<sup>1</sup>, Erdal Taşgın <sup>2</sup>, Sadullah Bahar <sup>3</sup>, Sefa Lök <sup>2</sup>

#### **Abstract**

Aim: Nandrolone deconate (ND), a testosterone analog, is often used at higher doses as doping agent except for medical treatment in sportsmen and sportswomen. Higher doses and/or misusing of ND may affect many system or organ in the body. The aim of the present study was to investigate the volumetric effects of ND on the adrenal gland zones of male and female rats using stereological techniques.

Material and Method: Totally 34 Spraque Dawley rats (30 days, 17 male, 17 female) were divided male and female groups. After than sex groups were divided three groups; Healthy control group (n:5, male :113± 2.9 g, female: 107±5.2 g, 500 μL normal saline solution, IP, 5 days in the a week for 4 weeks), vehicle group (n:6, male: 113±3.2 g, female: 111±2.4 g, peanut oil 500 μL, IP, 5 days in the a week for 4 weeks) and ND group (n:6, male: 115±3.31 g, female: 112±1.6 g, ND 10 mg/kg, IP, 5 days in the a week for 4 weeks). End of the study, all rats were euthanized and adrenal glands of rats were removed immediately. Obtained tissues were fixed with Bouin's fluid and paraffin blocks were prepared with routine histological technic. Serially sections were done by systematic random sampling method and sections were staining with H&E. Slices were imaged with microscope (4x objective) and transferred to personal computer. Zone and medulla volume of adrenal glands were estimated by Cavalieri principle.

Results: ;In male rats, there were significant differences in the volume of zona glomerulosa, zona fasciculata and medulla between control and vehicle groups (P<0.05). Medulla volumes were different between vehicle and ND groups (P<0.05). However ND represents experimental group and vehicle represents oil group. There was not any difference between the ND and control groups. In female rats, there was not any difference between groups.

Conclusions: It may be stated that ND treatment does not seem to effect the adrenal glands in different sexes.

Keywords: Nandrolone Deconate, Adrenal Gland, Cavalieri

# OP. 409 THE EFFECT OF EXERCISE TRAINING ON PAIN THRESHOLD, PLASMA AND ANTERIOR CINGULATE CORTEX BETA ENDORPHIN CONCENTRATIONS IN RATS UNDER HIGH FAT DIET-INDUCED OBESITY: A MICRODIALYSIS STUDY

 $\underline{\mathsf{Mehmet}}\, \underline{\mathsf{Seyran}}^{\, 1},\, \mathsf{Aliye}\, \mathsf{G} \\ \mathsf{\ddot{u}} \mathsf{n} \mathsf{do\breve{g}} \mathsf{du}^{\, \, 1},\, \mathsf{Y}.\, \mathsf{G} \\ \mathsf{\ddot{u}} \mathsf{l}\, \\ \mathsf{\ddot{o}} \mathsf{z} \mathsf{k} \mathsf{a} \mathsf{y} \mathsf{a}^{\, \, 1}$ 

#### **Abstract**

**Objective:** Exercise is being recommended to prevent many health-related conditions such as obesity. Regular exercise is known to induce pain threshold alterations during and/or following exercise which is termed exercise-induced hypoalgesia (EIH). Research on EIH has been focused on beta endorphin (BE) which is known as a hormone. Several reports demonstrated to increase BE concentrations following exercise at plasma, and/or several brain regions such as hypothalamus, periaquaductal grey matter, striatum, and anterior cingulated cortex (ACC).

In this study, we investigated the alterations of pain threshold and beta endorphin concentration in plasma and ACC following thermal stimulation in both sedentary and exercise trained rats under high

<sup>&</sup>lt;sup>1</sup> Necmettin Erbakan University Faculty of Medicine Department of Histology and Embryology

<sup>&</sup>lt;sup>2</sup> Selcuk University School of Physical Education and Sports

<sup>&</sup>lt;sup>3</sup> Selcuk University Faculty of Veterinary Medicine Department of Anatomy

<sup>&</sup>lt;sup>1</sup> Akdeniz University School of Physical Education and Sports

fat diet (HFD)-induced obesity.

**Methods:** Forty male Sprague-Dawley rats were assigned to one of four groups: sedentary control (C), exercise trained (T), high fat diet (HFD) and exercise trained under high fat diet (HFD+T). Standard rat chow was given ad libitum to animals in C and T groups. HFD was induced a diet regimen containing 50% beef tallow throughout 8 weeks.

Exercise trained groups were subjected to 5 days / week for 8 weeks of motor driven treadmill exercise. Each training session started with a 10 min warm- up at 19 m.min<sup>-1</sup> and finished a cool-down at the same time and speed. Following a familiarization period at the first two weeks at 19 m.min<sup>-1</sup>, running time and speed gradually increased from 30 min at 19 m.min<sup>-1</sup> during the first week to 80 min at 26 m.min<sup>-1</sup> during the final training week. The control and HFD groups were placed on the treadmill twice a week in order to adapt to the experimental situation. They received a total of four 'adaptation sessions' in which they exercised for 15 min at 12 m.min<sup>-1</sup> in the first session; during the last 'adaptation session' the animals ran for 45 min at 26 m.min<sup>-1</sup>.

At the end of the 8 weeks of the experimental period, microdialysis probe-implantation surgery was performed under anesthesia, then rats were mounted in a stereotaxic frame, and microdialysis probe was implanted vertically into the ACC according to the atlas of Paxinos and Watson. Three days following probe implantation, rats were placed individually on a hot plate at 55°C as thermal stimulation. Thereafter, animals were individually placed into the freely moving cages, perfusion was started by using Ringer solution, and four microdialysate samples were collected every 30 min.

Food and water consumption and weight changes of animals were recorded during the experimental period, and exhaustion time and withdrawal latency for hindpaw on a hot plate at 55°C was recorded as pain threshold. After the last sample was collected, rats were sacrified and plasma, interscapular (brown) and epidydimal (white) fat mass, and brain tissues for histological verification of probe were collected. BE concentrations at plasma and microdialysate samples were measured.

Results were given + SD, data of the four groups were analyzed by using Kruskal Wallis test, and repeated measurements of groups were done by using Wilcoxon test. A level of p<0.05 was accepted statistically significant.

**Results:** Food consumption of animals in HFD group was increased at the first 5 weeks. At the end of 8<sup>th</sup> week, it was decreased compared with the C group. Weight changes of HFD and C groups were found insignificant, and 8 weeks of exercise training did not alter the food consumption and weight changes of animals receiving HFD. Interscapular fat mass was found to be higher in HFD group compared with the C and T groups, and exercise training was found to prevent this increment.

Animals in T and HFD+T groups had significantly higher exhaustion time compared to C and HFD groups. Exhaustion time of HFD group was found lower compared with the C group.

HFD group had lowest pain threshold latency compared to other groups. Pain threshold of animals in HFD+T was found to be increased following exercise training.

Lowest BE concentrations at plasma and ACC were found in HFD+T, and HFD groups, respectively. Plasma BE concentration of HFD+T group was found to be lower compared with the T group. On the other hand, a tendency of increase of BE concentration was found in HFD+T group compared with the HFD group.

**Conclusion:** Our results showed that, animals received HFD during 8 weeks had lower pain threshold, plasma and ACC BE concentration, and moderate running exercise for 8 weeks was partially restores this alterations. Our study reveals new evidence to clarify the effect of physical exercise on pain threshold alterations and possible mechanisms in obesity which is one of the most important public health problem.

Keywords: Exercise, Rats, Pain Threshold, Beta Endorphin

### OP. 469 COMPARISON OF EYE MOVEMENT PARAMETERS OF TABLE- TENNIS PLAYERS WITH NON-ATHLETES

Reza Behdari <sup>1</sup>, Erdal Zorba <sup>2</sup>, Mehmet Göktepe<sup>3</sup>, Recep Soslu <sup>3</sup>, Şakir Bezci <sup>4</sup>

- <sup>1</sup> Islamic Azad University–East Tehran Branch-Tehran
- <sup>2</sup> Gazi University School of Physical Education and Sports
- <sup>3</sup> Ağrı İbrahim Çeçen University School of Physical Education and Sports
- <sup>4</sup> Karabük University School of Physical Education and Sports

#### **Abstract**

Aim:

In turn, there are some important factors to sports. These, strength, size, flexibility, and the ability to see is the ability to think. Of the characteristics of table tennis ball in different directions at high speed and due to the movement of the players must act quickly. Visual system plays an important role in the coordination of movement. In some sports, the front pillar of career skills, hand-eye coordination is an important service a lot of tennis and ball spin and speed of commuting are different from each other. Top spin, spin slowly, and eventually some hard tennis players need to have skills in action. Many studies of saccadic movements and hand-eye co-ordination between the high correlation was found. Based on this professional table tennis player in the premier league and among people who play sports some visual parameters is planned to investigate.

#### Method

In this study, ranging from ages 16 to 31 and at least 3 years from 20 to 64 people playing table tennis top athletes volunteered to participate. The control group consisted of 20 people who play sports. Results:

All of the athletes who participated in the study eye examination is passed. Visual parameters was investigated by pre-test and post-test. Data analysis was performed with ANOVA, Tukey's test due to the difference of the arithmetic mean of the group was administered, significant levels (P < 0.05) were considered. Near and far saccadic saccadic test, a professional table tennis players and those who play sports acuity and accommodation, (easy to see adaptation) characteristics of the significance level a year ago (p < 0.001) were considered.

The result:

When we examine the results in the near and distant saccadic saccadic test table tennis players to play sports with no significant difference between the groups was observed. Probably the reason for the success of these two parameters may be one of table tennis players. And the ability to be used as a parameter in the selection.

Keywords: Visual Acuity, Near Saccadic, Saccadic Away

# OP. 482 INVESTIGATING THE EFFECTS OF PILATES EXERCISES ON BODY COMPOSITION AND ENERGY CONSUMPTION

<u>Ayla Neşe Soykan</u><sup>1</sup>, Fırat Akça <sup>1</sup>, Mitat Koz <sup>1</sup>

#### **Abstract**

#### Aim:

The Pilates is a very effective exercise that combines both eastern and the western concepts by including yoga (a mind body method), breath, flexibility, relaxation, strength and endurance. It is well designed to enhance both physical and mental well-being. Pilates training also strengthens the deep, core muscles and improves movement, efficiency and muscle control. Pilates is considered to be effective to improving fitness, conditioning and overall quality of life (Frediani, 2005).

Aim of this research was to investigate and compare the effects of pilates exercises on the sedentary

<sup>&</sup>lt;sup>1</sup> Ankara University Faculty of Sport Sciences

women's body composition and energy consumption.

#### **Methods:**

Fourteen sedentary women have participated to this study as an exercise group (age= 38,78±8,32year, length= 1,63±4,59cm, weight= 1st mesaurment 62,64±7,48, 2nd mesaurment 59,92±7,41 kg.) For every subject, age, body weight, height, chest and pelvis size, energy expenditure measurements via armband, skinfold thickness' (triceps – suprailiac – femur) and sit-reach flexibility tests have been made as a pre-test respectively. The exercise group has been carried out some pilates exercises twice a week for 55 minutes for 8 weeks. These tests have been repeated at the beginning and at the end of the exercise program. An analysis has been made to understand whether there is a correlation between the pre-test and the final test by computing the paired t-test, average (X) and standard deviation (SD). Pearson correlation analysis have been used in a package program called SPSS to examine the results of all tests and this has been checked over significance level of 0.05 (p<0.05).

#### **Findings:**

Positive significant relationships were found between age and body weight in the 1st measurements (r=0.76, p<0.01)

Positive significant relationships were found between age and body weight and BMI in the 2<sup>nd</sup> measurements (r=0.79, r=0.70 respectively, p<0.01)

Positive significant relationships were found between total energy and percentage of body fat in the  $1^{st}$  measurements (r= 0.68, p<0.05)

Positive significant relationships were found between active energy and percentage of body fat in the 1<sup>st</sup> measurements (r=0.69,p<0.01)

Positive significant relationships were found between active energy and percentage of body fat in the  $2^{\text{nd}}$  measurements (r= 0.56,p<0.05)

Negative significant relationships were found between active energy during the exercise and weight in the  $1^{\text{St}}$  measurements (r= -0.54, p<0.05)

Negative significant relationships were found between active energy during the exercise and weight in the  $2^{\text{nd}}$  measurements (r=-0.60, p<0.05)

#### **Conclusion:**

According to the data obtained from the research, a significant differences in the measurements of sedentary womens' weight, BMI, body fat mass, pelvis-abdomen circumference measurement, skin fold thickness and elasticity has been determined. It has been observed that body fat mass decreases while active energy is increasing during the exercises. As a result, it can be concluded that pilates exercises can be effective in protection of health by effecting body composition positively on sedentary women.

Keywords: Body Composition, Energy Consumption, Exercise, Pilates, Physical Congruity

### OP. 496 EFFECT OF ACUTE FOOD AND FLUID INTAKE ON DXA BODY COMPOSITION MEASUREMENT

<u>Ulviye Uğur</u><sup>1</sup>, Latife Hasgül <sup>1</sup>, Nehir Tuna <sup>1</sup>, Ayça Turan <sup>1</sup>, Süleyman Bulut <sup>2</sup>, Hüsrev Turnagöl <sup>2</sup>

#### Abstract

**PURPOSE:** Today, in the determination of total body composition, dual-energy X-ray absorptiometry (DXA) (fat mass, lean mass and bone mass as a three-component model) is considered as a gold standard. The aim of our study is to investigate the effect of acute food and fluid intake on body composition measurement assessed by DXA.

<sup>&</sup>lt;sup>1</sup> Hacettepe University Physiotherapy and Rehabilitation

<sup>&</sup>lt;sup>2</sup> Hacettepe University Faculty of Sport Sciences Department of Nutrition and Exercise Metabolism

**MATERIAL AND METHOD**: Our study group consists of 18 volunteers,healthy male participants between 20-30 ages (age =  $24.78 \pm 5$  years, weight =  $79.91 \pm 12$  kg, height =  $181.37 \pm 15$  cm, BMI =  $24.27 \pm 4.4$  kg / m 2). Participants are divided in terms of their level of physical activity into 3 groups:sedentary, recreational and sports. Each group consists of six individuals. Each participants was measured; respectively height by stadiometer (Holta, United Kingdom), body hydration levels by urine refractometer (Atago, the URC-NE d  $1000 \sim 1050$ , Japan), body mass by Tanita (TBF 401, Germany), body composition by the DXA (Lunar Prodigy Pro, USA) after an overnight fast. After the completion of fasting measurements participants are subjected to consume food and liquids and they are recorded in grams and ml. After 1 hour measurements were repeated except height. Individuals DXA body composition measurements, following fasting and nutrition, fluid intake, were analyzed using SPSS 21 package program with Wilcoxon and paired Student's t-test.

**FINDINGS:** DXA body composition measurements after fasting and food-liquid consumption are examined. According to this, it is statistically significant differences in whole body fat percantage of participants (p = 0.01), (p < 0.05). In terms of the regional (arms, legs, trunk, gynoid and android) fat percentage, merely the body fat percentage was found as statistically significant difference (p = 0.01), (p < 0.05). There is a significant difference between total lean body mass of participants (p = 0.003), (p < 0.05). We found significant changes in some regional lean body mass which are lean body mass (p = 0.00), (p < 0.01) and android fat-free mass (p = 0.00), (p < 0.01). However, there is no significant difference in arms, legs and gynoid fat free mass (p > 0.05).

**CONCLUSION:** In our study DXA body composition measures performed in fasting provide a certain standart and increase measuring accuracy. It is more practical and convenient to have DXA body composition measurements after one night fasting, in order to minimize measurements errors and maintain a standart protocol.

Keywords: Dxa, Body Fat, Gynoid, Android, Lean Body Mass

### OP. 534 EFFECT OF AEROBIC-STEP AND PLATES EXERCISES ON BODY COMPOSITION, BLOOD LIPIDS AND BLOOD GLUCOSE IN MIDDLE-AGED WOMEN

İlknur Özdemir<sup>1</sup>, Sultan Harbili <sup>2</sup>

#### **Abstract**

**Purpose:** The purpose of the study was to research effects of aerobic-step and plates exercise on body composition, blood lipids and blood glucose in middle-aged women.

**Methods:** Sedantary women in the 24-35 (n=22) and 36-45 (n=23) age groups volunteered to participate in this study. Aerobic-step and plates exercises applied to the subjects one hour per day and three days per week for 8 weeks. The intensity of aerobic-step exercise was determined as 60-70% of target heart rate of the subjects. The physical fitness parameters of women was determined measuring waist-hip ratio, *circumferences*, *free body mass*, *body fat mass*, *body fat percent*, *body mass index* (*BMI*), measurements of body composition, height, body mass. Resting heart rate, sistolic blood preasure (SBP), diastolic blood preasure (DBP), total cholesterol, triglyceride, high density lipoprotein (HDL), low density lipoprotein (LDL), blood glucose levels was determined in blood samples taken pre- and post- training programe. Differences between age groups was analysed by independent t-test, and changes between pre- and post exercise was tested using paired t-test.

**Results:** Body mass and BMI decreased in both groups after exercise period (p<0.05). Body fat percent and fat mass decreased in 24-35 age group after exercise period (p<0.05). No significant differences were observed in blood presure of both groups while the resting heart rate decreased in both groups after training period (p<0.05). A significant decrease was found in the *circumferences of the* shoulder, chest, waist, hip and biceps in both age groups after exercise (p<0.05). It was determined that the *circumference of the* waist and the biceps was significantly greater in 36-45 age group than other group (p<0.05). It was revealed that the waist-hip ratio only decreased significantly after

<sup>&</sup>lt;sup>1</sup> Pamukkale University Acıpayam School of Vocational

<sup>&</sup>lt;sup>2</sup> Selçuk University School of Physical Education and Sports

exercise in 24-35 age group (p<0.05), and the waist-hip ratio was significantly lower with respect to 36-45 age group (p<0.05). Blood glucose level did not changed in both groups, it was found that LDL-cholesterol and total cholesterol levels showed a significant decrease in both groups after exercise (p<0.05). Triglyceride level decreased in 24-35 age group while HDL-cholesterol level only increased in this age group (p<0.05). No significant difference was found between groups in blood parameters.

**Conclusion:** It was revealed that aerobic-step and plates exercises programe have positive effect on body composition, heart rate, and blood lipids in middle-aged women although it was more significant in 24-35 age group whereas it has no effect in blood glucose and pressure.

Keywords: Aerobic-Step, Blood Glucose, Blood Lipids, Middle-Aged Women, Plates

# OP. 553 EFFECT OF BODY GLYCOGEN STORES ON SUBSTRATE UTILIZATION DURING ENDURANCE EXERCISE

Süleyman Bulut<sup>1</sup>, Hüsrev Turnagöl<sup>1</sup>

#### **Abstract**

**Aim:** It is well known that fasting activates fat metabolism. Beside, recent years many research studies accumulated that commencing exercise with low muscle glycogen is an effective strategy to activate fat metabolism and gain more training adaptation than normal muscle glycogen state. To test whether exercise in the fasted state with normal or low muscle glycogen is superior to activate fat metabolism than fed normal or low muscle glycogen pairs we set up this study.

**Method:** We recruited 11 moderately trained, young, men cyclist who volunteered to participate in this research stdudy. We designed fed and fasted (overnight) exercise trials which are separeted by one week with counterbalanced randomization. Prior to the study all subjects joined maximal test to determine VO<sub>2</sub> peak and peak power output (PPO). For both trial subjects attended two 60min exercise session at 70% VO<sub>2</sub> peak (Fed: FdE1, FdE2 and Fasted: FaE1, FaE2) with one hour rest period, thus the second exercise period aimed to be performed with low muscle glycogen.

**Results:** There were significant effect of low muscle trials on insulin decrease and glycerol rise in between Fd1-F2(p= 0.014, for insülin and for glycerol, p= 0.004) and FE1-FE2 (p= 0.05, for insülin and p= 0.03, for glycerol). But there were no additive effect of fasted state over fed counterpart to decrease in insülin level or to increase in glycerol level. Total fat oxidation (g /60min) was found significantly high between FdE1-FdE2 (12.4  $\pm$  6.4 versus 24.5  $\pm$  7.28, p< 0.001) and FdE1-FaE2(12.4  $\pm$  6.4 versus 26.2  $\pm$  6.84, p= 0.002). On the other hand respiratory exchange ratio (RER) showed a decrease with implying an increase trend in fat oxidation. RER droped to 0.89  $\pm$  0.03 in FdE2 from 0.95  $\pm$  0.03 during FdE1. So there were no additive effect of fasted state over fed counterpart to decrease in RER value or to increase in fat oxidation. However total CHO oxidation decreased significantly between FdE1-FdE2 (154  $\pm$  21.1 versus 125.9  $\pm$  27.2, p= 0.002) and FdE1-FaE2 (154  $\pm$  21.1 versus 115  $\pm$  12.9, p= 0.001) trials.

**Conclusion:** In conclusion we found that there is no superior effect of overnight fasted state exercise with depleted muscle glycogen stores over fed counterpart to increase fat metabolism. And it seems that the major determinant to improve fat metabolism in this study is the state of muscle glycogen rather than liver glycogen stores level.

Supported by HU.BAB PhD Thesis Grant (Project number: 013D09407001)

Keywords: VO2 Peak, Insulin, Glycerol, RER, Fat Oxidation

<sup>\*</sup>This research is produced from master thesis with same title

<sup>&</sup>lt;sup>1</sup> Hacettepe University Faculty of Sport Sciences Department of Nutrition and Exercise Metabolism

# OP. 597 THE RELATIONSHIP BETWEEN PHYSICAL ACTIVITY AND COGNITIVE STATUS IN THE ELDERLY

Neslihan Lök<sup>1</sup>, Sefa Lök<sup>2</sup>

#### Abstract

**Aim:** It is more likely for the elderly to maintain their cognitive functions when they have regular and rhythmical exercise patterns. Therefore, this study investigated relationship between physical activity and cognitive status in the elderly.

**Methods:** This is a descriptive correlational study. The study population included a total of 1354 over-65 subjects cared for by a Family Health Center. Using the well-known sampling method, the sample size was estimated as 251 elderly individuals with a 5% standard deviation and a 95% confidence interval. Data were collected with a questionnaire about the socio-demographic information about the elderly, "the International Physical Activity Questionnaire" to evaluate the physical activity levels of the elderly, and "the Standardized Mini-Mental State Examination (SMMSE)" to evaluate the cognitive status of the elderly. The demographic data in this study were analyzed using the chi-square test to assess the relationship between number and percentage distributions, socio-demographic characteristics and the International Physical Activity Questionnaire, and correlation analysis to assess the relationship between the International Physical Activity Questionnaire and the SMMSE. The results were evaluated at a significance level of p <0.05.

**Results:** Among the participants, 52.5% were female, 41.3% were in the 70-74 age group, 55.7% were married and 64.9% were primary/secondary school graduates. In addition, 51.7% of the participants were non-smokers and 84% did not drink alcohol, 40.2% perceived their health status as very good/good, and 58.9% were at a normal weight (Body Mass Index (BMI): 18.5-24.9). In terms of their physical activity levels, 62.2% of the participants were inactive, 32.5% had low activity, and 5.3% had high activity. In terms of their cognitive status, 13.3% of the participants had a moderate level of cognitive impairment and 50.6% had a mild level of cognitive impairment whereas 36.2% were found to have normal cognitive abilities. A comparison of the participants' socio-demographic characteristics in terms of their physical activity levels showed that 33% of the female against 29% of the male were inactive and this difference was statistically significant (x²=11.346, p=0.03). In terms of the age groups, on the other hand, 29.8% of those in the 70-74 age group were inactive while 16.7% of those in the 65-69 age group had low activity, and the difference was statistically significant (x²=36.365, p=0.00). There was a negative and strong relationship between the subjects' physical activity levels and cognitive status (r=-0.794, p=0.00).

**Conclusion:** The study found that variables such as gender, age, education level, health perception, smoking and alcohol consumption, and BMI affected the level of physical activity in individuals. In addition, there was a direct and strong relationship between physical activity level and cognitive status, and individuals could be more active and healthy providing that their physical activity levels increase.

Keywords: Aging, Physical Activity, Cognitive Level

<sup>&</sup>lt;sup>1</sup> Akdeniz University Faculty of Nursing

<sup>&</sup>lt;sup>2</sup> Selcuk University School of Physical Education and Sports

# OP. 608 PHYSICAL FITNESS MEASUREMENTS CREATE AWARENESS ABOUT PHYSICAL ACTIVITY AND HEALTHY LIVING

Hasan Gökten<sup>1</sup>, Ali Cenk Tortum <sup>2</sup>, Nalan Tepe Gökçe <sup>3</sup>

- <sup>1</sup> Ministry of National Education TVF Sport High School
- <sup>2</sup> Ministry of National Education Cankaya 27 Aralık Lions Secondary School
- <sup>3</sup> Ministry of National Education Nefise Andiçen Technical Vocational Anatolian High School

#### Abstract

**Purpose** The purpose of this study; Of the students in the 7-17 age range of health-related physical fitness test to do. To understand the importance of physical activity. Create awareness about healthy living.

**Method** This research was performed 7-17 years old students all schools in Ankara. The first research 450,000 students participated measurement. The second research 340,000 students participated measurement. Students in health-related physical fitness levels were measured five parameters

- 1 Body Mass Index Calculation
- 2 Flexibility Test
- 3 Muscle Strength Test
- 4 M uscle endurance Test
- 5 Strength Cardiovascular System

After the first measurement, the students were given the training program to increase physical activity. The study of all who served in Ankara Physical Education and Classroom Teachers attended. The measurement results were forwarded to the Education Directorate in Ankara. The results were evaluated as a project coordinator

**Results** The difference between the first and second measurements were as follows;

Obesity Rate has decreased 2%.

Flexible Rate has decreased 4%.

Muscle endurance Rate has 1% increase

Muscle Strength Ratio 2% increase

Cardiovascular Endurance System Rate not changes were observed.

**Conslusion** We are use to Physical Education lessons more effective and efficient. We need to make two measurements every year. Students should be given to the follow-up training programs. So that health-related physical fitness levels will increase.

Keywords: Physical Education, Physical Activity, Healthy Lifestyle, Physical Fitness

# OP. 616 DETERMINATION OF SOMATOTYPE FEATURES AND DIFFERENCES BETWEEN THE DOMINANT-NONDOMINANT HAND GRIP STRENGTHS OF ELITE FEMALE FENCERS

 $\underline{\mathsf{Defne}\ \mathsf{\"Ocal}\ \mathsf{Kaplan}}^1, \mathsf{Bilgehan}\ \mathsf{Baydil}\ ^1, \mathsf{Ahmet}\ \mathsf{Duvan}\ ^1$ 

#### **Abstract**

**Aim:** Aim of this study is to determine the somatotype features and differences between the dominant-nondominant hand grip strengths of elite female fencers.

**Methods:** Totally 13 volunteers joined to the study from Ukraine, Georgia, Azerbaijan, Belarus and Turkey Women's Fencing National Team athletes being in World and Europe Cup preparatory camp in 2014. It was found that the mean age of the athletes is 20.07 years, the mean height of the athletes is 165.41 cm and the mean body weight of the athletes is 61.01 kg.

Measurements were carried out using tools and measurement techniques according to international standards. In the study, height, body weight, humeral and femoral epicondyle widths, contracted upper

<sup>&</sup>lt;sup>1</sup> Kastamonu University School of Physical Education and Sports

### ORAL PRESENTATIONS SPORT AND HEALTH SCIENCES

arms, thighs, waist and buttocks circumferences; triceps, subscapular, Suprailiac and calf skinfold thicknesses and right hand-left hand grip strengths were measured.

When calculating the somatotypes of fencers *Heath-Carter Somatotype Calculation Method* is used. Data is calculated statistically with the program SPSS 12 and findings are analyzed and interpreted. In the analysis of data Student T Test, Mann-Whitney U and Pearson Correlation tests were used. As the level of significance p<0.05 is adopted.

**Findings:** As a result of measuring, the mean somatotype of female fencers is calculated as 3.90-3.50-2.32 endomorphic mesomorph. Of the athletes, the mean waist measurements is 68.32 cm, hip measurements is 95.08 cm and mean waist-hip ratio is 0.72 calculated. For 9 of the athletes dominant hand was found right hand and for 4 athletes dominant hand was found left. Dominant hand grip strength mean is measured as 34.35 kg and nondominant hand grip strength mean is measured as 29.11 kg. Significant differences were found between the forces of hand holding and non holding the sword. **Results:** As a result, somatotype of elite female fencers is found as endomorphic mesomorph. Findings of the study are important for contributing general anthropometric conditions to be laid down and guiding the athletes during talent selections in the future.

Keywords: Fencing, Somatotype, Anthropometry, Grip Strength

# OP. 634 EFFECTS OF MOUTH RINSING WITH DIFFERENT CONCENTRATIONS OF CARBOHYDRATE SOLUTIONS ON ENDURANCE PERFORMANCE

 $\underline{\text{Tuğba Nilay Güngör}}^1$ , Hüsrev Turnagöl $^2$ , Şükran Nazan Koşar $^2$ , Süleyman Bulut $^2$ , Yasemin Güzel $^2$ , Tahir Hazır $^2$ 

#### **Abstract**

It is reported that mouth rinsing with carbohydrate (CHO) solutions improves endurance performance. Research suggested that the improvement in exercise performance by CHO mouth rinsing may be due to activation of brain regions believed to be involved in reward. These findings come up with the question that mouth rinsing with different concentrations of CHO solutions could activate brain reward regions at different degrees and may improve performance accordingly. Hence, the purpose of this study was to investigate the effects of CHO mouth rinsing with different CHO concentrations (3%, 6% or 12%) on endurance performance. Nine recreationally active, healthy men (24.22±2.22 years; VO<sub>2max</sub> = 46.77±4.91 ml/kg/min) participated in this study which was designed as a double-blind, placebo-controlled randomized protocol. Participants visited the laboratory 5 times. During the first visit participants attended maximal workload and body composition tests, on the other four visits 20 km cycling exercise with 2.5 kg resistance were completed as fast as possible. It was not allowed to decrease pedal revolutions below 60 rpm during the exercise tests. Experimental trials were separated by minimum of 48 h and conducted at the same time of the day with 10 h fasting period. During the 20 km time trials subjects rinsed their mouth with different concentrations of CHO solutions or placebo solution every 2.5 km of the trial completed. Blood lactate (La) levels, blood glucose (Glu) levels and rating of perceived exertion (RPE) were measured every 5 km of the trial completed. HR was recorded throughout the trials. Two-way repeated measures analysis of variance (4x4) was used to determine the effects of mouth rinsing with different concentrations of CHO solutions on endurance performance. Mauchly test was used to determine the validity of spherecity assumption of the repeated measures.

Performance time, average power and heart rate (HR) did not differ between trials (p>0.05). There were no differences in blood La, blood Glu and RPE between trials (p>0.05). Time to complete 5 km distance periods, average power and HR values of the periods did not differ between trials (p>0.05). In conclusion, mouth rinsing with different concentrations of CHO solutions does not affect performance time, average power, blood La, blood Glu, HR, RPE, time to complete 5 km distance periods, and

<sup>&</sup>lt;sup>1</sup> Başkent University Faculty of Health Sciences

<sup>&</sup>lt;sup>2</sup> Hacettepe University Faculty of Sport Sciences

average power and HR values of 5 km periods.

Keywords: Carbohydrate, Solution, Mouth Rinse, Endurance

# OP. 650 EVAULATION OF FLUID CONSUMPTION AND BODY COMPOSITION IN ADULTS

Rüveyda Esra Erçim<sup>1</sup>, Süleyman Bulut <sup>2</sup>, Hüsrev Turnagöl <sup>2</sup>

#### **Abstract**

**Objective**: Excessive fluid loss, but also reduces exercise performance, however, the body temperature above the normal (> 37.5) may lead to pose a health risk. In this study, liquid consumption status of individuals by determining whether there is a relationship between body fat and whether body fat percentage difference measured by two different methods (BIA and DXA), between individuals was conducted to examine. In addition, individuals calcium intake was calculated and calcium intake and bone mineral density relationship was also examined.

Methods: Study was conducted in the laboratory by Hacettepe University, Faculty of Sport Sciences, Department of Nutrition and Metabolism in Exercise and all data were collected on the same day. Volunteer participants was applied the questionnaire to determine the general characteristics (age, smoking and alcohol use, marital status, eating habits etc.) and to examine food consumption for food consumption records with 24-hour retrospective reminder method and for fluid consumption used the 41-point fluid consumption frequency records. In addition, IPAQ-mini (International Physical Activity Questionnaire-Short) physical activity questionnaire was also applied to determine participants' the status of physical activity. Anthropometric measurements of height and weight were measured according to the method and body composition and bone mineral density were measured by İnbody and DXA (GE Lunar Prodigy Pro, ABD). Data obtained from a questionnaire and anthropometric measurements were analyzed with statistical software package SPSS22.

Results: The study included 15 female volunteers subjects. The mean age of subjects completed the study was 20.13 (min: 19-max: 21) years. 60% of participants thought that a healthy diet, 93.3% of never smoked, 86.7% of never used alcohol and all of them does not have any health problems. According to the IPAQ-mini-survey all of the subjects who completed the study were sedentary. The average fluid consumption of the individual that obtained from the fluid consumption frequency records was 2081 mL and water consumption from the record of food consumption was amount 1980 ml. While between both fluid and water consumption and BIA and DXA measurements of body fat were an inverse correlation; among that water consumption and body fat percentage was higher inverse correlation. In addition, a high positive correlation was found both BIA and DXA measurements of body fat percentages. There was not found a significant relationship between calcium intake and bone mineral density (p> 0.05).

Conclusion: The results of the study was found that while decreasing consumption of individual liquid and especially water, body fat ratio increasing significantly. The measurements by used DXA are considered the most accurate measurements. BIA which is the more commonly used were found a high positive correlation with DXA, so that it gives similar results with DXA measurements has showed. We can say that if the DXA is absent, the BİA could use to measure the body fat. The prevention of diseases which related to directly body fat, such as obesity and cardiovascular disease, can be effective to increase fluid consumption. More comprehensive studies could be done about it. Between DXA bone mineral density and 24-hour calcium intake of individuals was not a significant relationship. This is known that because of long-term inadequate calcium intake especially over the 30 years of individuals will cause bone deformation. Therefore, there is no relationship was not a surprising result.

Keywords: Fluid Consumption, Body Composition, BIA, DXA

<sup>&</sup>lt;sup>1</sup> Hacettepe University Faculty of Health Sciences Department of Nutrition and Dietetics

<sup>&</sup>lt;sup>2</sup> Hacettepe University Faculty of Sport Sciences Department of Nutrition and Metabolism

# OP. 668 AN INVESTIGATION OF MAKING PHYSICAL ACTIVITY STATUS AND PREVENT FACTORS OF THE PARTICIPATION TO PHYSICAL ACTIVITY AMONG UNIVERSITY STUDENTS

Eren Uluöz<sup>1</sup>, Zeynep Filiz Dinç<sup>1</sup>, Ali İhsan Avluk<sup>1</sup>, Cem Yoksuler Yılmaz<sup>1</sup>, Arzu Dönmez<sup>1</sup>, Mert Çayırcı<sup>1</sup>, Semih Namlı<sup>1</sup>, Bayram Bulmuş<sup>1</sup>, İsmail Güven<sup>1</sup>, Semiha Eker<sup>1</sup>, Mehmet Döğer<sup>1</sup>, Okan Antekeli<sup>1</sup>

#### Abstract

**AIM:** Humans have been more inactive life by day by with changed the living conditions and the impact of technological developments since the industrial revolution. Sedentary lifestyle threatens to humans' health in many ways such as social, physical, psychological, physiological. Knowledge of physical activity participation rates and the identification of factors that prevent participation in this regard can contribute to solutions that can be produced. The aim of this study was to investigation of making physical activity status and barriers of the participation to physical activity in University students.

**METHOD:** This study aimed to determine the existing situation is a cross-sectional study. Totally 530 undergraduate volunteer students, 226 female and 304 male, participated in the study. Mean age of participants was  $21,77\pm2,73$ . Data was collected an information form prepared by researchers. This form contains some question about demographic variable and attending to physical activity such as "making physical activity", "Preferred types of physical activity", "reasons for participating in physical activity", "Factors that prevents doing physical activity". The data obtained in this study are summarized as descriptive statistics such as mean, standard deviation and frequency and percentage values. The independent samples t-test was used to test the significance of the mean difference between groups. In order to determine the relationship between categorical variables, chi-square test was used. Statistical significance level of p <0.05 was adopted.

**FINDINGS:** According to findings 45% (240) of the participants take part in physical activities, 54% (290) did not take part in any physical activities. In order to find out any possible sex difference in participating in physical activities chi-square test was used and results showed that females' participation level were significantly lower compared to males' participation level (X2= sd=1, p<0.01). Results showed that 38.28% of the 226 female participants participate in physical activity, but 63% tend to participate less in physical activity; also 51.97% of the 304 male participants participate in physical activity but 48.03% did not. The most preferred physical activity types were walking, swimming, soccer, fitness/body building, jogging/running. Reasons to participate in physical activities were mentioned as hobby, to have better physical appearance, to develop social relationships. Reasons to avoid physical activities reported by participants as inconvenient class schedule, insufficient facilities, dislike of physical activities. The mean age of group who reported doing physical activity was 20.67±2.71, and who reported not doing any physical activity was 22.63±2.39. In addition, statistically significant difference was found between age groups who reported doing physical activity and not doing any physical activity, t(528)=-9.07, p< 0.05.

**CONCLUSION:** In conclusion, the findings of the students participating in physical activity are examined to make these activities the main purpose of being healthy, recreational activities and to have a good physical appearance was found. Walking, swimming and football the most preferred types of physical activity have been reported. Walking and swimming is low cost and easy to apply, football is the high prevalence of these activities can be considered as the reasons for preference. Result of the study show that more than half of all students in the study, nearly half of male participants and the majority of female participants have not make any physical activity. Especially the participation average of women found below the levels in developed countries. Students in the group cannot participate in physical activities close to half the number of teaching hours that are incompatible and lack of facilities without gender differences in factors that prevent participation in physical activity reported. Likely to prevent participation in physical activity, although dozens of factors, a large portion of respondent lessons, they cannot participate in physical activity due to non-compliance reported. In this study, further evidence in support of these findings, the average age of the group to

<sup>&</sup>lt;sup>1</sup> Çukurova University School of Physical Education and Sports

non-participate in physical activity is significantly higher than participants. Literature show that especially among university students according to gender differences in physical activity participation rate reached 80% in some developed countries. In this study, although the rates obtained in our study are close to most of our country, participation rates are significantly lower than in developed countries. In order to increase participation in physical activity among university students in our country to take necessary measures students' increasing participation in physical activity by governments may help to protect the physical and psychological health may be considered.

Keywords: Physical Activity, University Students, Prevent Factors To Physical Activity

# OP. 679 SCREEN TIME DIFFERENCES IN TERMS OF SOME SOCIO-DEMOGRAPHIC VARIABLES IN THE UNIVERSITY STUDENTS

Emine Çağlar <sup>1</sup>, <u>Ayda Karaca</u> <sup>2</sup>, Naile Bilgili <sup>3</sup>, Gökhan Deliceoğlu <sup>1</sup>

- <sup>1</sup> Kırıkkale University School of Physical Education and Sports
- <sup>2</sup> Hacettepe University Faculty of Sport Sciences
- <sup>3</sup> Gazi University Faculty of Health Sciences

#### **Abstract**

**Aim:** The purpose of this study was to examine screen time differences in terms of some sociodemographic variables (gender, socioeconomic status, parent's education level, access to technology etc.) in the university students.

**Method:** One thousand thirty four male ( $M_{age}$ = 21.00, SD = 1.68 years) and 1175 female ( $M_{age}$ = 20.63, SD = 1.57years), a total 2209 ( $M_{age}$ = 20.80, SD = 1.61 years) university students participated in this study. Data about demographic information and screen time were collected by using a questionnaire developed by researchers. The questionnaire was administered to participants with self-report method in classroom settings. The screen time (hours/week) refers to the combined time of watching TV/video, watching/playing/working on a computer, playing video games. The Family Affluence Scale II (FAS-II, Boyce & Dallago, 2004) was used to determine socioeconomic status of students. FAS-II has four items with possible lowest score 0 to possible maximum score 9. FAS-II and Socio-Economic Level Scale (SES) (Bacanlı, 1997) were administered to different sample (n = 50) to test validity of the FAS-II. The correlation coefficient was found 0.74 (p < 0.05) indicating acceptable level for validity. t test, one way ANOVA and univariate ANOVA were used to determine screen time differences in terms of socio-demographic variables.

**Results:** The average screen time of the university students was 4.33 hours/day. 2 (sex) x 3 (socioeconomic status) univariate variance analysis revealed significant sex (F(1,2153) = 132.28; p<.001) and socioeconomic status (F(2,2153) = 39.00; p<.001) differences in screen time (hours/week) (p<.001). Male students and those with high socioeconomic status had higher screen time. One way ANOVA showed significant screen time differences in terms of parental education and place of residence (p<.001). The students living in the dormitories and those with low parental education (primary school and below) had lower screen time. Also the students who have opportunity watching/using TV, computer and access to internet in the place of residence had higher screen time than the students who have not these facilities (p<.001). Furthermore, the students who have own room in the family house had higher screen time (p<.001). The students who have TV, computer, and access to internet in their own room had higher screen time (p<.001). When the inspection of screen time according to the number of people in their family, the students whose family formed four people and below had higher screen time (p<.001). In addition, there were significant screen time differences according to the number of computers at home (p<.001). The students who have no computers or have only one computer at their home had lower screen time than those who have two or more computers.

**Conclusion:** It can be concluded that the screen time as a sedentary behavior in the young adults is quite high and the students with high socioeconomic status and the male students had higher screen

### ORAL PRESENTATIONS SPORT AND HEALTH SCIENCES

time than their counterparts. These findings can be taken into account as a warning indicating increases in the sedentary lifestyle of the young adults.

Keywords: Screen Time, Socioeconomic Status, Family Affluence Scale, University Student

# OP. 682 PHYSICAL ACTIVITY LEVEL AND DECISIONAL BALANCE PERCEPTIONS FOR EXERCISE IN UNIVERSITY STUDENTS

Ayda Karaca<sup>1</sup>, Emine Çağlar<sup>2</sup>, Gökhan Deliceoğlu<sup>2</sup>, Naile Bilgili<sup>3</sup>

#### Abstract

**Aim:** The aim of this study was to determine physical activity level and decisional balance perceptions for exercise in university students.

**Method:** A total of 1754 volunteer university students ( $M_{age} = 20.83$ ; SD= 1.64 years) participated in this study of which 826 were male ( $M_{age} = 21.03\pm1.68$ ) and 928 were female ( $M_{age} = 20.65\pm1.58$ ). Demographic information form, Turkish version of International Physical Activity Questionnaire-Short Form (IPAQ-Short Form) (Öztürk, 2005), Habitual Physical Activity Assessment Questionnaire (HPAAQ) (Karaca and Turnagöl, 2007), and Turkish version of Decisional Balance Scale for Exercise (Cengiz et al., 2008) were used to collect data. All instruments were administered to the students in their classroom settings. Descriptive statistics, student t test, MANOVA were used to analyze data. Guidelines for Data Processing and Analysis of the IPAQ-Short Form was used for the classifications (low, moderate, high) about level of physical activity.

**Results:** The students' participation in PA (total duration (hours/week) of walking, moderate and vigorous PA) in a week was examined and the result was significantly in favor of male students when compared between sexes (p < 0.001). No significant difference was observed in the duration of physical activity (total duration (hours/week) of walking, moderate and vigorous PA) between students with different levels of parental education (p > 0.05). 2 (sex) X 3 (physical activity level) MANOVA revealed significant sex (p < 0.05) and physical activity level (p < 0.01) differences in pros and cons scores of participants in exercise behavior. Follow-up analysis of variance indicated differences in only pros scores in exercise behavior according to sex (p < 0.09) and physical activity level (p < 0.001). When the mean score was examined the pros scores was found to be higher in female students with physically more active. The sport participation of the students was surveyed in terms of sport participation of their parents and close friends. The students whose mothers, fathers, and close friends did not participate in regular PA have not been participating in regular PA during last month (85.5 %, 84.9 %, and 89.5 %, respectively). It was found that the students whose mothers, fathers and close friends participated regular PA have been participating in regular PA in the last month (25.1%, 22.3%, and 36.0%, respectively).

**Conclusion:** As a result it was determined that the male students' total duration (hours/week) of physical activity (walking, moderate and vigorous PA) was higher than the female students'. The physical activity (walking, moderate and vigorous PA) duration of the students was independent from both mother's and father's education levels. The female students and highly physically active students had higher pros scores for exercise.

Keywords: Physical Activity Level, Decisional Balance Scale For Exercise, University Students

<sup>&</sup>lt;sup>1</sup> Hacettepe University Faculty of Sport Sciences

<sup>&</sup>lt;sup>2</sup> Kırıkkale University School of Physical Education and Sports

<sup>&</sup>lt;sup>3</sup> Gazi University Faculty of Health Sciences

# OP. 687 EVALUATION OF LOW BACK PAIN AND BIERING-SORENSEN TEST SCORES IN FIELD HOCKEY PLAYERS

Mustafa Gümüş <sup>1</sup>, <u>Tevfîk Cem Akalın</u><sup>1</sup>, Hüseyin Hakan Kudak <sup>1</sup>, Resul Çekin <sup>2</sup>, Mustafa Ertuğrul Çıplak <sup>1</sup>, Bilal Emektar <sup>1</sup>, Geylan Bostan <sup>1</sup>

#### **Abstract**

#### Introduction

About 80 percent of the population suffers from a bout of low back pain at some point in their life. However, some people are at higher risk of chronic and acute back injuries due to their lifestyle. Athletes are at greater risk of sustaining a lumber (lower) spine injury due to physical activity. Whether the sport is skiing, basketball, football, ice skating, soccer, running, golf, or tennis, the spine undergoes a lot of stress, absorption of pressure, twisting, turning, and even bodily impact. In this study, the aim is to determine the frequency of low back pain by means of Biering-Sorensen Test (BST) in field hockey players and to compare this frequency with normal population and to determine whether risk factors have an effect on low back pain.

#### Method

In this study, the participants are the players of national field hockey team (n=36), players in the Open field Hockey Super League (n=160) and control group (n=170) which consists of university students of similar age.

The demographic properties, history and risk factors of low back pain were questioned on the players and the control group attending the study and 'Biering Sorensen Test' which tests the strength and endurance of back extensors was applied.

The data were evaluated by means of SPSS 16.0 for Windows software and mean values were represented as "arithmetic mean  $\pm$  standard deviation". ANOVA test, student t test, Bonferroni posthoc test and Pearson correlation analyses were used for the comparisons between the measurements. Results of the analyses were evaluated with 95% confidence interval.

#### Findings

In this study, life-long prevalence was found as 82% in players, and 66% in the control group, however no statistical difference was determined between the two groups (p=0,524). Statistically significant differences were determined between the frequency of low back pain in the last three months and VAS scores of the players and control group. The average BST duration was  $95,2\pm18,5$  seconds in national players,  $101,3\pm15,4$  seconds in super league players and  $110,6\pm16,8$  seconds in the control group. Statistically significant difference was determined between the BST scores of national players and control group (p=0,001). It was found out that being a national field hockey player was 3,4 times risky for low back pain when compared with league players and control group.

#### Results:

The fact that BST whose validity and reliability have been proven, is a cheap, simple and useful clinical test in individuals suffering from or liable to suffer from low back pain in the future was supported. In the light of these findings, it is assumed that low back pain is frequently experienced by especially national field hockey players and causes considerable loss in exercise and sports efficiency.

Keywords: Field Hockey, Biering Sorensen Test, Low Back Pain

<sup>&</sup>lt;sup>1</sup> Bülent Ecevit University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Amasya University Faculty of Education Department of Physical Education and Sports

#### OP. 707 PHYSICAL ACTIVITY AND BODY COMPOSITION IN ADOLESCENT GIRLS

<u>Yasemin Güzel</u><sup>1</sup>, Nilay Tuğba Güngör <sup>2</sup>, Pınar Öztürk <sup>1</sup>, Canan Koca <sup>1</sup>, Şükran Nazan Koşar <sup>1</sup>

#### **Abstract**

**Purpose:** Childhood and adolescent obesity has increased dramatically in recent years worldwide so as in Turkey. Physical activity is one of the major preventive measures of overweight and obesity. Therefore, the aim of this study was to determine body composition and physical activity of Turkish adolescent girls.

**Methods:** A total of 330 adolescent girls between the ages of 12-17 participated in this study voluntarily. Height, weight and body fat percentage were measured and body mass index (BMI) was calculated as the ratio of weight in kilograms and height meters squared (kg/m²). Based on the Centers for disease Control and Prevention (CDC) 2000 BMI charts, obesity was defined as BMI $\geq$ 95<sup>th</sup> percentile, overweight as 95<sup>th</sup>>BMI $\geq$ 85<sup>th</sup> percentile, normal weight as BMI < 85th percentile and underweight as BMI <5<sup>th</sup> percentile. Participants' physical activity level was determined by "Godin Leisure-Time Physical Activity Questionnaire". A physical activity score related to health benefits were computed.

**Results:** Results indicated that 3.3% of the participants were underweight. Most of the participants were normal weight (75.5%). The prevalence of the overweight and obesity in the sample were 13.3% and 7.9%, respectively. Body fat percentages for the corresponding BMI percentile categories were 10.6±2.3, 21.4±4.8, 32.2±2.1 and 38.6±6.6, respectively. According to the health related physical activity score, 55.2% of the participants were active, 22.7% were moderately active and 22.1% were insufficiently active. There was no significant difference in body fat percentages among physical activity categories (p>0.05). Similarly, there was no significant difference in physical activity score of normal and obese/overweight adolescent girls (p>0.05). Highest physical activity score was at age 13, it decreased by age afterwards.

**Conlusion:** The results of this study revealed that although most of the participants had normal weight the high prevalence of overweight and obesity in Turkish adolescent girls requires attention. Furthermore, the prevalence of physical inactivity in adolescent girls was high. Therefore, precautions should be taken to promote physical activity and prevent overweight/obesity in adolescent girls.

Keywords: Adolescents, Physical Activity, Body Composition

<sup>&</sup>lt;sup>1</sup> Hacettepe University Faculty of Sport Sciences

<sup>&</sup>lt;sup>2</sup> Başkent University Faculty of Health Sciences Department of Sports Sciences

# OP. 22 CONTENT ANALYSIS OF OFFICIAL TWITTER ACCOUNT OF UNDER-20 FOOTBALL WORLD CUP

Levent Atalı<sup>1</sup>, Burak Gürer <sup>2</sup>

#### **Abstract**

The aim of this study is to examine the content of use of the official Twitter account of the FIFA U-20 World Cup during the period of the organization. It has been sought answers to the questions 'What is the intensity of use of the official Twitter account of the FIFA U-20 World Cup?" and 'What are the contents of tweets posted via official Twitter account of the FIFA U-20 World Cup?" for this purpose. The official Twitter account of the FIFA U-20 Football World Cup held in Turkey in 2014 was examined and a total of 4558 Tweet content posted via official Tweet account were determined. The frequency distribution was used for the analysis of the data obtained. It was found that the official Twitter account of the FIFA U-20 Football World Cup followed 213 people and had 7494 followers. It was found that 4558 Tweets were posted via the official Twitter account and seen that "overall organization information" with 1558 tweets was in the first place among the contents and respectively, 829 tweets with the content of "match summary", 672 tweets as "re-tweets", 629 tweets with the content of "photo", 456 tweets with the content of "match review", 279 tweets about "personal descriptions about athletes and coaches", 108 tweets "about the football matches" and 30 tweets about "TV programs" followed it when sorted. Although the number of followers was 7494, the number of those who posted tweets was only 168 and this state shows that those who follows the cup prefer to remain as audience. In conclusion, we saw that the official Twitter account of the U-20 Football World Cup has been subject to a one-way flow, mostly. We can say that a re-planning which will ensure an active participation of followers would be more useful.

Keywords: Twitter, The World Cup, Social Media, Football

# OP. 30 AN INVESTIGATION ON SPORTS ACTIVITIES AND TEACHERS' JOB SATISFACTION: BATMAN PROVINCE SAMPLE

 $\underline{\operatorname{Burak}\,\operatorname{G\"{u}rer}}^1$ , Mehmet Emin Yıldız  $^1$ , Melike Esentaş  $^1$ 

#### Abstract

This study investigated teachers' professional satisfaction based on their sports activities in Batman province. The study utilized Minnesota Job Satisfaction Questionnaire (MSQ) which was developed by Weiss, Davis, England and Lofquist in 1967 whose adaptation to Turkish and reliability studies were undertaken by Baycan (1985). The scale used in the study was composed of two sections. The first section included questions about teachers' personal characteristics and the second section was composed of questions aimed to identify teachers' job satisfaction. Data was obtained from the teachers employed in Batman province in 2014. Independent Samples t- test was used in data analysis and One-way Anova was utilized in cases where there were more than two groups involved. Ki-square test and Fisher's test were used in examining the relationships among variables. Results showed no significant relationships between that gender, smoking, excess weight, diseases, professional seniority, regular sports activities, known sports activities, age, desired sports branches, frequency of weekly sports activities and job satisfaction. A significant relationship was identified between gender and teachers' physical sports activities. According to the results, it can be argued that doing sports does not affect job satisfaction based on sports activities undertaken in Batman and some demographic

<sup>&</sup>lt;sup>1</sup> Kocaeli University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Batman University School of Physical Education and Sports

<sup>&</sup>lt;sup>1</sup> Batman University School of Physical Education and Sports

variables. It is possible to state that males do sports more. It will increase the possibility of doing sports in Batman when sports facilities in Batman are developed and increased in number.

**Keywords: Sports, Job Satisfaction, Teacher** 

#### OP. 34 VERBAL STATE OF FOOTBALL: TV PROGRAMS

### Selami Özsoy<sup>1</sup>

<sup>1</sup> Abant İzzet Baysal University School of Physical Education and Sports

#### **Abstract**

Football programs on television are broadcasted in almost all channels as types of programs often watched in Turkey. The format of these programs which does not normally include visuals of matches consists of talks about football agenda by ex footballers of major clubs, ex referees and mostly male sports commentators whose backgrounds are on journalism. Football programs, reported to Radio and Television High Council (RTHC) the most, are also associated with violence and unsportsmanlike conduct in matches as well. Current study investigated how football programs on TV are perceived by the viewers. A 23-item survey was developed related to the topic in line with the views of viewers and two academicians. Later the survey was configured on an internet site, opened to access between February 2013 and December 2013 and announced to public with the help of social media and sports news. The survey was answered by 423 participants. Following the factor analysis, number of items was decreased to 15 and a 3-factor structure consisting of "positive views", "negative views" and "referee criticism" was generated. The reliability coefficient of these 15 items was found to be  $\alpha$ =.688. Results show that participants had mostly negative perceptions regarding the football programs on TV. According to participants, football commentators try to increase ratings by creating tension. Compared to female participants, male participants perceive football programs on TV more positively (p<.05). Major leagues are discussed and generally males are addressed in these programs and they are intensively watched since they include arguments. Participants emphasized that biased comments are common in the football programs, fair play is not encouraged and principles are not followed. Participants also believe that commentators overdo their criticisms of the referees.

Keywords: Football, Sport, TV, Programs, Media.

# OP. 47 THE MEASUREMENT OF SPORT SERVICE QUALITY FOR MUNICIPALITIES AS LOCAL GOVERNMENT UNITS (KONYA CASE)\*

Yusuf Barsbuğa<sup>1</sup>, Hayri Demir <sup>1</sup>

#### **Abstract**

**Aim:** The aim of this study was to determine sport activity services municipalities carry out as local management units, consider viewpoints of people benefiting from these services and evaluate them as well. The participants of the study consist of 300 persons in total, including 90 persons from the center of fine arts included in the Meram District Municipality of Konya, 94 persons utilizing the Ertuğrul Gazi Recreational Facility in the Meram District Municipality of Konya and 115 persons from the center of vocational course in the Karatay District Municipality of Konya.

**Method:** In our study, the Service Quality Assessment Scale developed by Lam (2000), Turkish reliability and acceptability done by Gürbüz (2003) was performed. In evaluating data and finding estimated values, the SPSS 16.0 statistical package program was used. Here, the data were summarised using mean and standard deviation. The One-Sample Kolmogorov-Smirnov test examined whether the data showed normal distribution, and it was made clear that the data displayed normal distribution. Since the data appeared to be normally-distributed, the Independent-Sample T test and the

<sup>&</sup>lt;sup>1</sup> Selcuk University School of Physical Education and Sports

ANOVA test were also used for determining differences between the independent variables. The Tukey test from among multiple comparison tests was done to see what the difference resulted from as to independent variables. In this study, the error rate was 0.05.

**Measures:** As a result of our study; it was observed that there was no difference when the satisfaction levels of members were considered in the travel time, the marital status and the education level within the sub-dimensions of staff, program, facility and changing rooms in consequence of comparing the service quality expected and perceived from the members participating in the research. But the satisfaction level decreased when the membership duration, the usage frequency and the income level increased. Also, it was determined that the satisfaction levels of participants who had individual membership type and were over the age of 18, were higher than ones having family membership type and aged under 18.

**Results:** As a result of our study; it was observed that the expected and perceived service quality satisfaction approaches of participant members, effected from membership type, membership period, frequence of facility usage and ages of members.

\*This study completed with benefit from the Master Degree Thesis subjected as "The Measurement of Sport Service Quality For Municipalities As Local Government Units (Konya Case)" which accepted by Selçuk University Institue of Health Sciences Department of Sports Management on 31.05.2013.

Keywords: Municipalities, Local Governments, Sport Service Quality

# OP. 67 THE EFFECT OF ORGANIZATIONAL COMMUNICATION ON ORGANIZATIONAL COMMITMENT FOR THE ACADEMICS WHO WORK FOR THE FACULTIES OF SPORTS EDUCATION

Sevim Güllü<sup>1</sup>, Fatih Yenel<sup>2</sup>

- <sup>1</sup> İstanbul University School of Physical Education and Sports
- <sup>2</sup> Gazi University School of Physical Education and Sports

#### **Abstract**

The purpose of this thesis study is for the academics to measure the effect of communication on commitment who work in physical training and sports faculties to thier organisations in our country. The universe of the study is all of the academics who work in physical training faculties in 2013-2014 educational term. The sample is 336 academics that works in 22 universities and gives the training in question, randomly selected from seven geographical region. In this study embracing browsing model, local and foreign literature about the subject was browsed firstly, conceptual frame was formed by related literature information which could be said wide and systematicly analyzed, and finally reached the findings by the scale combining three parts that was reformed and used before. First part of the scale consists of demographical information such as gender, age, status, department and seniority, second part consists of 18 questions of organisational commitment and phrases about it (three dimensional as affective, normative and attendance), and the third part consists of 35 quesitons of organisational communication (five dimensional as informing, communication with the superior, communication with friends, pricing, promotion and career) and related phrases about it. The whole statistical analyses were made with SPSS bundle programme. It was reached that academics those work in physical training and sports faculties have more age and seniority shows more affective commitment in our country. On the other hand it was also reached that demographic variables does not provide a significant contribution to organisational communication. Besides, academics who have in good communication with their seniors and friends and who believe that they have a well-established disclosure process in their faculties have increasing affective and normative commitment, while their continuance commitment are to decrease. Consequently, organisational communication has positive effects on organisational commitment

**Keywords: Sports Education, Communication, Organizational Communication, Organization, Organi** 

# OP. 114 THE EXAMINATION OF CRITICAL THINKING LEVELS OF THE PHYSICAL EDUCATION AND SPORTS HIGH SCHOOL STUDENTS IN TERMS OF VARIOUS DEMOGRAPHIC CHARACTERS

T.Osman Mutlu <sup>1</sup>, Ahmet Yavuz Karafil<sup>1</sup>

#### Abstract

This research in Physical Education and Sports School students who are studying is done to determine the level of critical thinking. In the study, data collection instrument, California Critical Thinking Dispositions Scale Turkish version of the abbreviated (KEDEÖ) was used. April 17 to May 17 2014 Date of data collected, was evaluated using the SPSS 18.0 program. Taken from the arithmetic mean of the data obtained, frequencies and percentages were calculated. Data analyzed by t test and one-way analysis of variance (ANOVA) and Tukey tests were used. Students who participated in the study (N = 800) 64.4% males, 68.6% with a 2.00 grade point average between 3.00 average, with 67.4% having 2 or 3 siblings, 35.9% of families first child, 41.8% to the University before the start of where they live Metropolitan, 82% of education department they willingly chose, the 50.3% of the mothers level of education of primary school, 40.8% in their father's high school education, 81% one of the mothers occupations housewives, 27.6% of the fathers' occupations retired, 43.3% of family structures democratic, 73.8% of the socio-economic status moderate, 42.4% reputation of the family monthly income of 1001 between 2000 TL, 53.3% of the age group between 21 and 23 years of age, while attending social activities 62%, 41.3% was observed participating in scientific activities. As a result; Students that they receive from the California Critical Thinking Dispositions Scale total score were low (M = 214.805), surveyed students' grade university before beginning where they live, their father's education level, family structure, socioeconomic status, monthly income, participation in social activities, access to scientific sessions, they are attending school and with the ages level of critical thinking among a significant difference was found (P < 0, 05) (Table 21, 23, 29, 33, 35, 37, 39, 41, 43, 45). On the other hand, the surveyed students 'gender, grade point average, number of siblings within the family count of they are children, department selections, mother's education level, mother, father occupation and students' critical thinking levels (P> 0.05) at the level of significant difference wasnt found. (Table 20, 22, 25, 26, 27, 28, 31, 32). The findings obtained from this study in the same direction, to comment on students' critical thinking skills are included.

Keywords: Thinking, Critical Thinking, Physical Education And Sports

# OP. 131 EXPLORING THE OPINION OF FOOTBALL SUPPORTERS TOWARDS VIOLENCE IN FOOTBALL

Melih Nuri Salman<sup>1</sup>, Bilgehan Coşkuner <sup>1</sup>

#### **Abstract**

Among the most followed sport branches that have supporters at most, football is placed on the top. It is known that violence within football keeps its existence since the beginning of football and till today. There are many reasons behind violence that occasionally blazes out and is shaped according to the day's structure. Violence in football may occur because of many clustering factors such as the structure of nations, importance of competition that takes place between two teams, sociological structure of supporters and features of the rival teams. Recent element of violence in football is no more the problem of just a few nations, but became a global sports problem residually.

**Aim:** This study is done with the aim of determining the source of violence among football supporters and the relationship of violence and supporters.

<sup>&</sup>lt;sup>1</sup> Muğla Sıtkı Koçman University School of Physical Education and Sports

<sup>&</sup>lt;sup>1</sup> Aksaray University School of Physical Education and Sports

**Method:** The questionnaire is applied on 120 Beşiktaş supporters who enrolled Aksaray Beşiktaş'lılar Association right before Beşiktaş Elazığspor match that had been played at the 34th week of Super League.

**Findings:** %80 of questionnaire's attendees is male and %20 of them is female. It is designated that %81,7 of the attendees follow competitions continually and regularly and %18.3 of them follow matches occasionally. The rate of supporters who think that his / her team is treated unfair is pretty high with a rate of %72.5. Moreover the rate of supporters who involve in violent incidents is observed as %46.7. %54,2 of the supporters think that the main source of violence is related to the performance and position of the team within the league. %30.8 of them defends that club cannot afford sufficient transfers because of financial problems, while %15 of the supporters think that supporters do not have sufficient education levels. Supporters defend the idea of those incidents that were experienced during previous competitions (%45,83), media effect (%15,8) and statements made by club's administration (%10,8) are the reasons behind behaviors towards aggression. It is detected that acts of violence which occur during competition are believed to be procured by impropriety of referee decision (%45,8), negative behaviors of rival team's players (%22,5), negative behaviors of supported team's players (%11,7) and negative behaviors of team's audience (%9,2).

**Conclusion:** At the end of the research, preventive precautions are suggested as giving information to the supporters about the rules of the play (%32,5), encouraging female supporters to attend to competitions (%19,2), and suggesting media and sports authors of writing articles that may affect supporters in a positive way (%22,5). It is also designated that security precautions inside and outside of the field (%25,8) that is applied effectively may also play an aversive role in preventing football violence.

**Keywords: Sport, Futbol, Violence, Supporters** 

# OP. 144 IDENTIFYING SECONDARY SCHOOL STUDENTS' PARTICIPATION LEVELS IN SPORTS (ERZURUM SAMPLE)

Yeşim Songün<sup>1</sup>, Dursun Katkat <sup>2</sup>, Orcan Mızrak <sup>3</sup>

- <sup>1</sup> Gümüşhane University School of Physical Education and Sports
- <sup>2</sup> Mersin University School of Physical Education and Sports
- <sup>3</sup> Atatürk University School of Physical Education and Sports

#### **Abstract**

**Aim:** The aim of this study is to identify the sports rate of secondary school students and their parents living in Erzurum and then to carry out an evaluation about parents' being a role model for their children in terms of doing sports.

**Method:** Research population was composed of 29.906 students studying in central secondary schools of Erzurum Provincial Directorate for National Education. Regarding the research sample, 1050 8th grade male and female students were selected by using random sampling method. In the study, students' opinions were obtained through a questionnaire developed by the researcher as well as making use of interview method. Based on data about parents, rates between children's engagement in sports were measured. Concerning reliability analysis, questionnaire was applied to 50 students and Cronbach Alpha reliability coefficient was determined as 0.78. These 50 questionnaire used for the analysis were excluded and the other data was analyzed through 1000 students. In the given analysis, descriptive statistics and correlation were used and the significance level was found as 0.01.

**Findings:** A total number of 1000 students consisting of 571 (%57,1) female and 429 (%42,9) male students participated in this study. It was observed that % 53,8 of students do sports whereas % 46,2 of them do not do sports. It was identified that among the students who do sports (%53,8), the majority (%34,1) do sports 1-3 hours a week and only % 39,8 of them are registered to a club. Although Erzurum is one of the cities where skiing is very popular, % 44,6 of the students don't go skiing. Regarding Winter Universiade 2011, only % 46,7 of them watched a competition. %54,5 of students visited ski jump tower used in the games. In the study, parents engagement in sports was also analyzed

and it was found out that parents' of majority (% 52,5) don't do sports. Of students whose parents do sports, % 64,8 of them do sports whereas %35,2 of them don't do sports. On the other hand, of these students whose parents don't do sports % 43, 8 of them do sports while %56,2 of them don't engage in sports.

Concerning parents' educational status and the time children spend on sports, a positive and significant relationship at a low level was found (r=237, r=267; p<01). Also, regarding parents' occupations and children's engagement in sports, a positive significant relationship p<01 at a low level (r=108, r=204) was found.

As a result; it was determined that the majority of students do sports. It can be stated that mother's education status has more effect on the time child spend on sports compared to father's education status. Furthermore, increases in mother's occupational status effect the time child spend on sports more than father's occupational status.

**Keywords: Parents, Sports, Secondary School Students** 

# OP. 162 REFLECTIONS: ORGANIZATIONAL CHANGE INITIATIVES IN SPORTS CLUBS AND INTERACTION WITH CHAOS

### Selçuk Açıkgöz<sup>1</sup>

<sup>1</sup> Marmara University School of Physical Education and Sports

#### **Abstract**

Aim: The purpose of this study was to reveal change initiatives in sports clubs and examine them from the scope of chaos theory. The reason chaos theory had been used was to probe the linearity of changes and how changes had occurred in the course of chaotic conditions. Additionally, it was tried to point out to the effectiveness of chaos theory on change initiatives in Turkish sports clubs. The chaos theory had been started to use in social sciences since late 1980's. Subsequently, the theory took important place in social science studies, particularly on the subjects such as sensitivity to initial condition, disorder, non-linearity and etc. The non-linear side of organizations and the unpredictability of organizations in fast-growing industries induce organizations to give less importance towards systematic or planned change. This approach had led organizations to become more continuous and situational which eventually created important linearity between continuous change and chaos theory.

Method: In-depth interview had been adapted in the study in order to get detailed understanding of

sports clubs' executives on change initiatives. The chaos concept had been created through statements of respondents, without directing any question in that regard. The data collection process had conducted with 14 executives of sports clubs who selected from 4 different divisions of Turkish Football Leagues. The sports clubs was selected through convenience sampling technique, because it was found to be hard to access the required sample, particularly to the board member level. The questions formed as semi-structured question with open endings and its derived from the literature review of organizational change studies. The collected data had examined with content analysis.

**Findings:** The content analysis of interviews revealed 4 themes regarding the subject. These were disorder, chaos, non-linearity and the execution of change. Findings underline that the change initiatives of Turkish sports clubs has been occurring in non-linear and unpredictable situations. Additionally, this unpredictable changes in organizations; seemingly, take place as uncontrollable outcomes, regardless of the impact of executives.

**Results:** In addition to the studies that revealed the positive impact of chaos as an initiator of change, this study also found that chaotic environment of sports clubs led organizations to implement more change. However, the uncontrollable side of change and its concurrent side disable them to take the advantages of changes. Thereby, the changes exhibit failed attempts as change initiatives. Concurrent chaos also prevent organizations to find their path which consequently push them to continuous chaos in the particular sports clubs. As conclusion, it's derived from the findings that individuals have been taken more importance than the system of organizations or units. This result induce more uncertainty as individuals brings more complexity than systems itself. Lastly, even the unpredictable, continuous

changes lead to new changes in organizations, the lack of system and shared goals hamper organizations for successful outcomes.

Keywords: Sports Clubs, Chaos Theory, Organizational Change, Executives

#### OP. 188 CORPORATE SOCIAL RESPONSIBILITY AT CORPORATE FOOTBALL CLUBS

### Burçak Akansel<sup>1</sup>

<sup>1</sup> Ankara University Faculty of Sport Sciences

#### **Abstract**

**Aim:** The purpose of this study was to define economic, legal, ethical and philanthropic responsibilities of sport clubs and to present the views of clubs on these elements constituting CSR pyramid.

**Methodology:** This study was conducted applying a qualitative research method. The data was collected by means of in-depth interviews held with a manager in charge of CSR at BJK, FB, GS ve TS football clubs. These clubs were chosen not only because they are the most successful clubs in Turkey, but also because they are part of corporations quoted on stock exchange, hence more appropriate for the purpose of the study. The data collected was analyzed with qualitative means. The interviews, all of which were recorded, were transcribed and the transcriptions were read several times to group the statements of the participants. Categorizing the repeating words and statements, the content was analyzed.

**Findings:** Participants have explained that "providing income-expense balance", "being profitable", "creating economic added value" are among their economic responsibilities and as for their legal responsibilities, they have stated that clubs should obey the laws and legislations in their fields.

Answering the questions related to ethical responsibilities, participants have mentioned such issues as "prohibited substances", "fair-play", "hooliganism" and "transparency". With regard to philanthropic responsibilities, they have explained that the teams visit hospitals, schools, nursing homes and orphanages as well as making donations to various NGOs.

Participants have been asked to list these four CSR elements in order of priorities. For BJK, legal responsibilities ranked first and it was followed by ethical, economic and philanthropic responsibilities. With economic, legal, ethical and philanthropic responsibilities, FB was the only club that followed Carroll's order. GS listed economic responsibilities first and philanthropic responsibilities last while giving equal importance to legal and ethical responsibilities. For TS, legal responsibilities, which came first, were followed by ethical, philanthropic and economic responsibilities in this order.

Conclusion: In this study, it is found out that the importance the football clubs give to each CSR element differs from each other. Moreover, as the main objective of sport clubs is to win championships, it is inferred that sport clubs have athletic responsibilities, too. Such statements as "to succeed in the club's area of activity", "to maintain the success rate", "to get the highest rank", "to advance in European leagues" are made by participants during the interviews and can be classified under athletic responsibilities. Thus, when applied to sport, Carroll's CSR pyramid consists of five elements and "athletic responsibilities" should be at the bottom of it.

Even though CSR is a new concept in sport, it will gain importance at sport clubs in near future. Especially after the recent match-fixing case, it is obvious that sport clubs should give more importance to their economic, legal, ethical and philanthropic responsibilities while fulfilling their athletic responsibilities.

Keywords: Corporate Social Responsibility, Sport Management, Football

#### OP. 233 A STUDY ON ATHLETES' ATTITUDES TOWARDS HUMAN RIGHTS IN SPORTS

Reşat Sadık<sup>1</sup>, Nevzat Mirzeoğlu <sup>1</sup>

#### **Abstract**

**Introduction and Purpose:** Though sports is not a fundamental right in law, it is stated by such important institutions as the UNESCO (United Nations Educational, Scientific and Cultural Organization) and IOC (the International Olympic Committee) that it is a fundamental right to take part in sports activities.

It is essential that a convenient environment be provided and due legal regulations be introduced for those who do sports in order to gain them favorable features. Provision of these opportunities is only possible though acceptance of sports as a fundamental right and presents a new perspective on human rights in sports. The present study aims to determine athletes' attitudes towards human rights in sports and compare them according to various variables.

**Method:** The participants of the study were a total of 248 athletes (university students). Out of 248, 100 were females and 148 were males. An "Attitude Scale of Human Rights in Sports" has been developed for data collection. The ASHRS is a scale with 29 items and 3 dimensions. The reliability co-efficient is .82 (Cronbach Alpha). The T-test and ANOVA were used to analyze the data.

**Findings and Result:** The current study put forth that the athletes' attitudes towards human rights in sports were at the mid- and high levels.

**Keywords: Sports, Right, Human Rights in Sports** 

#### OP. 234 THE DEVELOPMENTAL PROCESS OF THE ASHRS

Reşat Sadık<sup>1</sup>, Nevzat Mirzeoğlu <sup>1</sup>

#### Abstract

**Purpose:** An attitude scale of human rights in sports was developed in this study based on the categorization in the Universal Declaration of Human Rights. The process is summarized as follows.

#### The Process

- 12 academics and 102 student athletes at the Higher School for Physical Education and Sports were asked this open-ended question: What does "Human Rights in Sports" mean to you? Thus, a pool with 121 items was formed for the scale. Later, some items were left out due to the fact that they were not clear and understandable. The number of the items was, therefore, reduced to 58.
- 1. 267 students at the Higher School for Physical Education and Sports were interviewed in the pilot scheme.
- 2. The KMO value was calculated to be 0, 84; the Barlett test 4236, 678; and p<0, 01. A scale with 3 factors emerged as a result of the analysis. The variance of the scale was observed to be % 52.
- 3. The reliability co-efficient was 0,82. A five point likert scale was used.

**Result:** As explained above, the "Attitude Scale for Human Rights in Sports" developed in this study was found to be a valid, reliable and practical tool appropriate to the purpose.

**Keywords: Sports, Right, Human Rights in Sports** 

<sup>&</sup>lt;sup>1</sup> Abant İzzet Baysal University School of Physical Education and Sports

<sup>&</sup>lt;sup>1</sup> Abant İzzet Baysal University School of Physical Education and Sports

#### OP. 256 INFLUENCE OF PARENTS TO PROFESSIONAL DEVELOPMENT OF CHILDREN

Erdoğan Tozoğlu<sup>1</sup>, Gökhan Bayraktar <sup>2</sup>

- <sup>1</sup> Atatürk University Kazım Karabekir Faculty of Education
- <sup>2</sup> Ağrı İbrahim Çeçen University School of Physical Education and Sports

#### **Abstract**

Assist of mothers and fathers in the development of children in low or high level is thought to be an important factor in the children's choice of profession and professional success sustained. Choice of profession in accordance with the interests and abilities of the children is considered as an important step to achieve success in their professions. As a result, both individual could be happy and dramatically this person will have positive impact on socio-economic development of the country; It is absolute. In this case, the choice of profession and development of children and the level of affection and assistance of parents while children are making their choice and also the determination of effective components are drastically important.

The purpose of this study is examine the impact of the level of assistance of parents to children in different variables and effects in the sport and to the development of the profession . Parents who are among different ages and business groups, including 170 women and 205 men in a total of 375 mothers and fathers were participated this research in the province of Erzurum "Career Development Help Scale" which was developed by Bacanlı and Kuzgun (2005) was used with the aim of collecting data In the analyzing of data the techniques of frequency distribution, t-test and ANOVA analysis of variance were used. Validity and reliability in total alpha value was calculated as 0.87. While analyzing the data, frequency distribution was used In the comparison of two independent variables. t test was used and in the comparison of more than two independent variables anowa analysis of variance techniques were applied. The difference between the opinions of groups was interpreted according to P = 0.05 significance level.

According to the findings; no differences between the marital status of their parents and the sport type that they had done; and the average level of assistance of occupational development have been emerged. However; when it was studied in terms of age, education level, occupation, sport participation and weekly process of doing sports, significant differences was found in the averages of assistance level to professional and occupational development. However the level of assistance to job development of parents who are doing sport is (Xdoingsport=90,80) higher than the parents who do not do sport(Xdontdosport=85,49).

Keywords: Parents, Career Development, Career Success, Doing Sport

# OP. 296 EVALUATE THE COMMUNICATION SKILLS OF THE TRAINERS AT THE AMATEUR SPORT CLUBS

Nesil Özbay<sup>1</sup>, Asil Özbay<sup>2</sup>

- <sup>1</sup> Ankara University Faculty of Sport Sciences
- <sup>2</sup> Gedik University Faculty of Sport Sciences

#### **Abstract**

**Purpose**: This study has been carried out in order to identify and evaluate the communication skills of the trainers coaching at the amateur sport clubs. Besides, the study is to determine whether the trainers commuciation skills level of the socio demographic variables like event, sex, age, branch, training degree and period of work form a semantic difference.

**Method**:The trainers coaching at the amateur sport clubs in Manisa form the basis of the macrocosm of this research. 125 trainers taking part in this study have been chosen by convenience sampling method which is not probabilistic. Datas of the research have been acquired by two different assessment and evaluation instruments. The first of these instruments is self-information form. The

second assessment and evaluation instrument is Communication Skill Evaluation Scale, developed by Korkut (1996), validity and reliability of which have been made. The datas acquired have been evaluated by Mann Whitney, Kruskal Wallis, ANOVA and t test analysis and their significance degree has been accepted as p<0.05.

**Findings**: Findings of the research the communication skill levels of the trainers coaching at amateur sports clubs were found  $4.43 \pm 0.30$ . The communication skill levels of female trainers and male trainers were found p=0.56, the communication skill levels of individual sports and team sports trainers were found p=0.07, age variable of trainers and communication skill levels were found p=0.49, training degree and communication skill levels were found p=0.48, period of work and communication skill levels were found p=0.67.

**Result**: As a result of this research, the communication skill levels of the trainers coaching at amateur sports clubs have appeared to be very high  $(4.43 \pm 0.30)$ . There have no differences obtained in the communication skill levels of the trainers in terms of gender (p=0.56; p>0.05), age (p=0.49; p>0.05), branch (p=0.07; p>0.05), training degree (p=0.48; p>0.05) and period of work (p=0.67; p>0.05).

Keywords: Communication Skill, Trainer, Amateur Sport Clubs

# OP. 298 THE ANALYSIS OF TURKEY'S OLYMPIC EDUCATION IMPLEMENTATIONS ACCORDING TO OLYMPIC LEGACY AND CANDIDATURE PROCESS

Yeşim Albayrak Kuruoğlu <sup>1</sup>, <u>Hülya Ünlü</u> <sup>1</sup>

<sup>1</sup> Gedik University Faculty of Sport Sciences

#### **Abstract**

Olympic Games has the power to deliver lasting benefits which can considerably change a community, its image and infrastructre. Olympic research has widely accepted that 'legacy' is something that is handed down 'from one generation to another'. This study critically reviews the legacy claims and implementations about Olympic Education in Turkey during Istanbul's Olympic and Paralympic Games bidding history. For this purpose, document analysing method was used by examining the Olympic researches, projects, programs, Istanbul's candidature file, newspapers and other written references. Descriptive analysing method was used in for interpreting the results. One of the remarkable findings of this study is, educational and cultural budget contains only 4,78 % of total non-OCOG budget in Istanbul 2020 candidature file. However, legacy planning has been one of the conjugated part of the International Olympic Committee's bid requirements for cities who want to host the Games. As a result, in the light of emerging challenges of the contemporary era, Olympic Education programs should be integrated within the national education curricula of Turkey.

Keywords: Olympic Legacy, Olympic Education, Candidature, Turkey

# OP. 330 ALTERNATIVE WOMEN'S WORLD GAMES AGAINST OLYMPIC GENDER DISCRIMINATION (1921-1934)

Ender Şenel<sup>1</sup>, İbrahim Yıldıran <sup>2</sup>

#### **Abstract**

**Purpose:** In this study, alternative women games, which was one of the operational response they developed against the efforts to prevent participation of women in the beginning with various cultural, religious, social and biological reasons, was examined in terms of the effects and its consequences.

**Method:** Literature review of qualitative research methods was used in the study. In this perspective,

<sup>&</sup>lt;sup>1</sup> Muğla Sıtkı Koçman University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Gazi University School of Physical Education and Sports

data, periodical publications related to alternative women games, which was one of the tools that they used to overcome obstacle in front of their participation in modern Olympics, was collected by reviewing and interpreted.

Findings: Although "the inspiration from ancient Olympic games" was generally given justification to Olympic gender discrimination that personally resulting from the philosophy of its founder, it can be said that the perception of women related to Victorian Era, which the social class to which Coubertin belong modeled, was the actual determinant. Hence, before the 1936 Olympics, in a radio conference in which he explained the philosophical basis of modern Olympics for the first time, Coubertin explained that the problem was related to social role of women by saying "...in my opinion, the true Olympic hero is the individual male adult... I personally do not approve of the participation of women in public competitions, which is not to say that they must abstain from practicing a great number of sports, provided they do not make a public spectacle of themselves..." Even Coubertin's opinion to prevent women became concrete in 1896 Olympics; this would cause development of women opposition and women taking stage with two branches (tennis and golf) in 1900 Paris without the formal approval of International Olympic Committee. After 1904 Olympics in which only American women participate, in 1908 and 1912, it was observed that the number of women participant increased. However, participation "within the framework of men permitted" and "in the level that will not undermine the current women perception" would lead Alice Milliat, who was the leader of developing women movement, to create their own international sport organization and International Women Sports Federation (FSFI) would be founded in 1921. After the first pioneering Women Olympics in 1921 Monte Carlo, IOC, which had a major concern in the face of positive effects of the games organized on 20 August 1922 in Paris with participation of 77 Athletes from 5 countries and included athleticism in the program as well on women, announced that international federations should take control of women activities. The success of first women Olympic games forced IOC to negotiate with FSFI about women athletics. According to negotiation between IAAF and Alice Milliat, 10 activities would be given to women athletes, the control of women activities would be left to FSFI, the word "Olympic" would be removed in women games. As a result of this, the name "Women World Games" was used instead of "Women Olympics" in 1926 (Goteborg), 1930 (Prague) and 1934 (London). However, in 1928 Amsterdam, Coubertin opposed to women's inclusion in some athleticism events, deterioration of two women in 800-meter was seen as an opportunity by the Baillet-Latour, the successor of Coubertin, it was decided that women should participate in proper and aesthetic events such as gymnastics, fencing and tennis, they should stay away from masculine events, and women were expelled from 800-meter event in 1932 Olympic Games. The decision of Alice Milliat, who saw that women athleticism events were not enough, to continue organizing Women's World Games resulted in inclusion of women in more athleticism events. As a victim of its own success, although it was closed in 1938, FSFI, whose structure was designed and implemented by Alice Milliat and her colleagues, would become a model for many independent women sports federations and clubs to struggle with current authorities.

**Conclusion:** The participation process of women in modern Olympics evolved from the certain prevention opinion of Coubertin to delimiting within the framework of men permitted, from this to ultimately acceptance. While the struggles of IOC and IAAF to prevent women from Olympic games with various decisions resulted in organization of women's own games, "competing women" gained interest and support of the entire world. Women's World Games proved that women could be successful in sports like men could, guaranteed the place of women in Olympics, provided increase of participation and events.

Keywords: Women's World Games, Alice Milliat, Olympism, Gender Discrimination

# OP. 332 BURNOUT AND EXECUTIVE LEADERSHIP STYLE PERCEPTIONS OF PHYSICAL EDUCATION TEACHERS

Volkan Aydoğdu <sup>1</sup>, Erman Öncü <sup>2</sup>, <u>Sonnur Küçük Kılıç</u> <sup>2</sup>

#### **Abstract**

**Objective**: One of the important factors that negatively affect the performances of teachers is burnout (Maslach, Schaufe ve Leither, 2001; Van Horn, Schauteli ve Enzman, 1999). It is also stressed that the school administrators' leadership qualities can be effective in teachers' burnout and stress levels in the educational institutions (Cemaloğlu, 2007). In the literature, however, there are not many studies conducted on the relationship between the executive leadership perceptions and the burnout of physical education teachers. In this study, the purpose was to examine the executive leadership perceptions and the burnout of physical education teachers according to some variables and to determine the relations between burnout and executive leadership perception. The purpose of this study was to examine physical education teachers' burnout and perceptions of executive leadership style according to some demographic variables, and to determine the relationship between burnout and perceptions of executive leadership style.

Methods: The study was based on a descriptive research model. It was conducted on 260 (65 female and 195 male) physical education teachers ( $M_{Age}$ =36.07) who worked in the public schools from different cities of Turkey organized under the National Department of Education in 2013-2014 Spring Semester. In the study The Burnout Measure (BM) and The Leadership Behavior Description Questionnaire (LBDQ) were administered on the participants as data collection tools. The BM that was originally developed by Pines and Aronson (1988) in order to measure the level of burnout was translated into Turkish by Çapri (2006). The scale was consisted of 3 sub-factor and 21 items, and all items were measured by using a five-point Likert scale. Cronbach Alpha reliability coefficient was measured as 0.96 for this study. The LBDQ was first developed by Hemphill and Coones (1950). It was translated into Turkish by Önal (1979). The scale was consisted of 2 sub-factor and 20 items and all items were measured by using a five-point Likert scale. Cronbach Alpha reliability coefficient was measured as 0.95 for this study. Descriptive statistics were performed on all variables including means, standard deviations, and Skewness and Kurtosis coefficients. MANOVA and regression analysis were also used in the data analysis. Cronbach's alphas were calculated for the scales in order to evaluate their internal consistencies.

**Results**: The mean of the BM and the LBDQ scores of the physical education teachers who participated in this study was 2.90 and 3.60, respectively. There was a significant difference in the scores of the participants' burnout in respect to the gender variable ( $\lambda$ =0.88, F=11.69, p=0.00]. According to this result, female teachers' average scores were higher than the male teachers' average scores. According to the gender variable, the scores of the participants' LBDQ differ significantly ( $\lambda$ =0.97, F=3.53, p=0.03). Male participants' average scores were higher than the female participants' average scores. The BM scores of the participants ( $\lambda$ =0.98, F=1.85, p=0.14) and LBDQ scores ( $\lambda$ =1.00, F=0.25, p=0.78) did not differ according to the grade levels they teach. According to the regression analysis, whereas the burnout was not predicted from the years of experience of the participants, %2 of the variance in perceptions of executive leadership was predicted from perceptions of executive leadership.

Conclusion: The burnout levels of the participants were at middle level and their perceptions of executive leadership were above the middle level. Whereas the female participants had higher burnout scores, the male participants had higher perceptions of executive leadership scores. The burnout and executive leadership perception scores of participants who worked both in secondary and high schools did not differ. Whereas the teachers' years of experience did not have important effect on determining their burnout, teachers' years of experience have an important effect on determining their perceptions of executive leadership. Additionally, our findings demonstrated that the teachers' perceptions of executive leadership have an important effect on determining their burnout. It is suggested that the

<sup>&</sup>lt;sup>1</sup> Ondokuz Mayıs University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Karadeniz Technical University School of Physical Education and Sports

future studies include larger samples.

Keywords: Physical Education Teacher, Burnout, Executive Leadership Style

# OP. 346 RISK MANAGEMENT IN SPORTS: A RESEARCH ON THE RISK ASSESSMENT OF THE SPORTSMEN IN TURKCELL SUPER LEAGUE

Halil Orbay Çobanoğlu<sup>1</sup>, Güven Sevil <sup>2</sup>

- <sup>1</sup> Anadolu University Faculty of Sport Sciences
- <sup>2</sup> Anadolu University Open Education Faculty

#### **Abstract**

**Purpose:** The main purpose of this study is to clarify the level of the sportsmen's risk assessments in Turkcell Super League and to emphasize the importance of risk management in sports.

**Method:** The research has been performed as a general scanning model. The research population consisted of the sportsmen in Turkcell Super League in the season 2006-2007. 273 soccer players participate in research from 15 soccer clubs.

A two-section survey including 30 questions was performed to get the research data. In the first section of the survey, there were questions about the sportsman's age, marital status, educational background, age of professionalism and tenure of office in his club. In the second section, there were statements related to finance management, insurance management, facility management and injury management, each having five options and was required to be evaluated according to the *Likert* scale. SPSS 12.0 for Windows packet programme was used for the statistical analysis of the research data. In this analysis, the frequency distribution, the percentage, the mean, the standard deviations were used as statistical techniques. The One-Way ANOVA test was used to determine the level of risk assessment of the target group related to their age, educational background, age of professionalism and tenure of office in his club. The Independent-Samples T-Test was used to determine the level of assessment of the target group related to their marital status and other status. The quantitative data were tested with a level of significance of p<0.05.

**Results:** As a result of the research; a meaningful distinction was found among the research group's level of risk assessment in terms of educational background (p=0,038) and status (p=0,013, p=0,026) related to finance management, among their level of risk assessment in terms of age (p=0,05) and age of professionalism (p=0,007, p=0,049) related to insurance management, among their level of risk assessment in terms of their educational background (p=0,023, p=0,036) related to facility management, among their level of risk assessment in terms of their age (p=0,016, p=0,046, p=0,009, p=0,042, p=0,014), educational background (p=0,005, p=0,026, p=0,010, p=0,014, p=0,024) and age of professionalism (p=0,041) related to injury management.

Conclusion: As a result of the research 2006 – 2007 season belongs to Turkcell Super League three-grade risk impact rating matrix were created with impact categories and sorted by the average value of the answers given. Clubs, in order to take precautions against, faced with the financial risks, insurance risks, facility risks and injury risks should be made in the proposal to embody risk management units. Keywords: Risk, Risk Management in Sports, The Risk Factors in Sports, Risk Assessment,

Keywords: Risk, Risk Management in Sports, The Risk Factors in Sports, Risk Assessment, Risk Classification Matrix

# OP. 358 POINT OF VIEW OF THE NEWPAPERS ABOUT THE SITUATION OCCURED DURING THE MATCH-FIXING PERIOD: CONTENT ANALYSIS

Gökhan Deliceoğlu $^1$ , Ramazan Ünver $^2$ 

- <sup>1</sup> Kırıkkale University School of Physical Education and Sports
- <sup>2</sup> Kırıkkale University School of Physical Education and Sports

#### **Abstract**

**Purpose**: The aim of this study is to analyze the contents of the themes discussed by the national newspapers on the face of events occured during match fixing period (3rd of july 2011). The research group consists of the sports pages of 3 different national newspapers (ACirculation:323.000±10.000;BCirculation=200.000±3.000; CCirculation=171.000±1.500).

Methods: The content analysis method was used for the purpose of analysing the themes discussed on the sports pages of the newspapers against match fixing period. The codings were written according to the criteria of survey and selection in accordance of the categories determined as a first step of the application of content analysis. Data was categorized according to the themes. The sports page of the total 135 newspapers published between 18.06.2011- 03.08.2011(15 days ago the match fixing period and 30 days after the match fixing period) were handled. The themes of the content of the total 494 sports pages analysed are categorized such as; Chapter about football player( Transfer fee or fee chared, The news about transfer, About Career, Injuries, Critisim about performance or game style, Statements of sportsman, About private life), Chapter about team (Financial situation, Transfer news, Youth System, Staff qualification status, Foreign quota, Team performance) Chapter about Referee( Critism about management of match, News about career), Chapter about Coach( Technical and tactical critisim, private life, fee charged, career related news, Coach transfer news), Chapter about managers( Personal criticism to managers, Private life of managers, Management of TFF, News related UEFA statements, Critisim about the Central Arbitration Committee), Chapter about spectators( News related unsportsmanlike behavior and participation rate to match), External factors (About the pyhsical conditions of stadium, political factors in sport), Other branches (the ones except football).

**Findings**: The frequency and percentage values of the data obtained by the content analysis of the themes in the sports pages of newspapers were obtained. SPSS 17.0 software package was used for descriptive statistics. According to the findings, before the match-fixing period, the rates of themes of the newspapers are respectively such as; 30.52% related to footballer, 20.69% related to team, 15.39% related to manager, 13.79% related to other branches, 8.57% related to coach, 6.9% related to referee, 2.07% related to specatator, 2.07% related to extrenal factors. After the match-fixing period, the rates of themes of the newspapers are respectively such as; 47.6% related to manager, 20.7% related to footballer, 12.3 % related to team, 9.5% related to coach, 3.35% related to other branches, 3.2 % related to external factors, 1.8% related to referee, 1.55% related to spectators.

**Result**: As a result, the differentiation in the themes mainly discussed by the newspapers has been identified with match-fixing period. The result was obtained that the managers consist of the group of which has the most news. At the same time, it is believed that the newspapers gave less place to the news of the other branches except football during the match-fixing period and so the match-fixing period indirectly affected the oher branches.

**Keywords: Chicane, Sports, Newspapers** 

#### OP. 367 APPROACHES OF SPORT MANAGERS TO THE PROMOTION OF SPORT

Ferhat Gündoğdu<sup>1</sup>, Hakan Sunay <sup>2</sup>

#### **Abstract**

**Purpose of the Study:** Nowadays, the promotion of sport is accepted as the most important target in the field of sport. It is seemed, also, as a major problem in sport management for our country. Evaluation and approaches style of sport managers regarding the problem of promoting sport is seemed to quite critical. In this study, first of all, regulations and studies about the promotion of sport as the national level were examined then it was tried to determine effective elements on the promotion of sport by the researcher. The purpose of this study is to determine approaches to the promotion of sports by high-level sport managers within national sport organization.

Research Methodology: Information was collected from 219 high level sport managers who work at

<sup>&</sup>lt;sup>1</sup> Turkish Armed Forces Sports School

<sup>&</sup>lt;sup>2</sup> Ankara University Faculty of Sport Sciences

Turkey's Ministry of Youth and Sport, Governmental Directorate General of Youth and Sport, sport federations and the provincial directorate of youth services and sport. The "Promotion of Sports" scale, which is developed and statistically tested by the author, was used for the data collection. The approaches to the promotion of sports by sport managers were determined by mean and standard deviation values. Mann-Whitney U test was used to compare two group that were examined whether there is a differentiation or not according to their personal characteristics' influence on their approaches to the promotion of sports. For more than two groups, Kruskal-Wallis variance analysis statistical method was used. Also Mann-Whitney U test was used to find out the source of the differentiation. Significant level was based on as .05 for this research.

**Findings:** According to the obtained findings, sport managers evaluate the "central organization" (=50,2802) as an important factor regarding the promotion of sport facilities. At the same time, they see "Media" (=9.0604) as the least important one and then it continues like "provincial directorate" (=20,0659), "education institutions" (=15,3407), and "private sector" (=9,1484). According their personal characteristics (gender, age and experience) there is no difference on their approaches but it changes according to their position [x2=(2)=15,423; p=,000; p>0,05] and education level [x(4)=15.532; p=,0.04; p<0,05].

**Result:** At the end of the study, it is obtained that sport managers evaluate the "central organization" as an effective factor regarding the promotion of sport facilities. But evaluating "education institutions"; "private sector" and "media" at very low level points by them reflects our national fact in the field of sport management according to the researcher. At the same time it is evaluated as an important result that the approaches of sport managers regarding the promoting sport changes according their both education level and position. They give more importance to the "education institutions".

Keywords: Sport Management, Sport Managers, Promotion of Sport

# OP. 370 EVALUATION OF SPORT FOUNDATION MANAGER'S LEADERSHIP AND MANAGEMENT ABILITIES

Veli Onur Çelik <sup>1</sup>, <u>Sevda Gökce</u><sup>1</sup>

#### **Abstract**

**Purpose:** Sport business firms exist for sport services to be presented to the society effectively. The sport business firms' managers are the people who preliminary responsible for ensuring people to receive the services in an effective way. To demonstrate good management of sport managers, they are also required to have leaderships skills in addition to management skills. The purpose of study is to evaluate the sport business firm manager's leadership and management abilities in Eskisehir.

**Methods:** The universe of the study included 115 sport managers who work in 68 sport foundation of the city Eskisehir. To evaluate the leadership and management skills of the participants a survey which was developed by Jerome Quatman in 1993 and adapted into Turkish by Yerlisu and Imamoglu in 2005 was used. The survey was composed of two sections. In the first section, there were questions related to demographic specialties, work experience and business that they work. On the other hand, the second part contained 12 questions that measure the extent to which manager used their management and leadership abilities. Second section were a 5-point Likert type scale that was ranging from 1(least) to 5(at most). t-test was used to analyze whether there was a difference between management and leadership abilities or not.

**Result:** As a result of data analysis it is found that manager of sport business had highest mean on the ability of value congruence skills ( $\bar{x}$ =4.19) and intuitive skills ( $\bar{x}$ =4.18) which belongs to leadership skills whereas they had the highest mean on the ability of human relation skills ( $\bar{x}$ =4.15) and conceptual skills ( $\bar{x}$ =4.08) from management skills. What's more there was not a statistically significant difference between management and leadership skills, t (114) = 1.86, p < .05. The mean of participants' leadership skills ( $\bar{x}$ =4.10) was higher than managements skills mean ( $\bar{x}$ =4.03). However

<sup>&</sup>lt;sup>1</sup> Anadolu University Faculty of Sport Sciences

this difference was not statistically significant.

**Discussion:** This study which focuses on the managers' leadership and management skills in Eskisehir sport business firms concludes that there are no significant differences between the two skills among the managers. In addition, it is found that the managers use the two type of skills in high levels and similar amounts. The findings are supported by the other studies in the relevant literature. It was expected that a successful manager used leadership and management skills at the similar level.

Keywords: Sport Business Firm, Leadership Skills, Management Skills

#### OP. 400 FAVORITISM IN SPORTS

İrem Kavasoğlu<sup>1</sup>, Uğur Özer <sup>2</sup>, Fatih Yenel <sup>3</sup>

- 1 Cukurova University School of Physical Education and Sports
- <sup>2</sup> Hitit University School of Physical Education and Sports
- <sup>3</sup> Gazi University School of Physical Education and Sports

#### Abstract

Aim: Today; favoritism –often perceived as a public issue- appears in sports in various ways. When favoritism -which does not serve to the objectives of the sportive activities, is against Olympic spirit and damages ethical values- occurs thanks to kinship relations it is called nepotism and if it occurs with appointing spouses, friends and significant others to positions of authority it is called cronyism. Sports should unite and integrate the society and sports should include such values as equality and fair play/competition. However; there are situations in which equality and fair play/competition in sports is neglected. The aim of the current study was to assess the fact of favoritism in sports in terms of cronyism, nepotism and -in more general sense- favoritism and partiality through athletes' experiences. Method: The study was a qualitative study due to the analysis techniques used for the data collection. In the study; interview technique was chosen as a qualitative study tool and semi-structured forms were employed. The study group was composed of a total of 6 athletes recruited with purposeful sampling method from wrestling, boxing, kick-boxing, wushu, muay that and taekwondo sports who expressed to have been subjected to favoritism in various ways.

**Findings:** When the data obtained through interviews were examined; three themes about favoritism were extracted: barriers in sportive objectives, combat management and referees' favoritism on behalf of other athletes. These themes were cronvism, nepotism and referee mistakes.

The participants told that referees favored some athletes for some reasons. In cronyism and nepotism themes; the participants expressed that favoritism occurred if the opponent was someone familiar/friend, a national athlete in the last year, child/relative of a referee or a director working in the federation. Also; the interviews uncovered that the participants were of the opinion that referees favored the opponent while the match continued in draws if the opponent was from referees region, was an athlete from the ex-club where referees worked or was an athlete from a popular and big club. As for referee mistakes; it was emphasized that referees sometimes caused injustice because they did not know the new rules or made scoring-mistakes.

Participants stated that favoritism was not peculiar to their sportive branches and education was a partial solution to eliminate the problem. It was told that the genuine solution depended on one's conscience, protection of athletes' efforts and rights and paying attention to not to appointing referees through kinship relations.

**Result:** As a result of the findings obtained from the interviews; it may be argued that favoritism existed in the above mentioned combat sports. Participants pointed out that favoritism occurred as nepotism and cronyism in these sports and they were subjected to injustices caused by referees. It will ensure awareness against favoritism and make significant contributions to eliminate favoritism -which is a crucial ethical problem- to conduct more scientific studies and to organize educational programs and seminars.

Keywords: Sports, Favoritism, Nepotism, Cronvism

### OP. 406 THEORY AND PRACTICE MEET IN SPORT MANAGEMENT: AN EVALUATION WITHIN THE FRAMEWORK OF FIELD EXPERIENCE

<u>Dilşad Çoknaz</u><sup>1</sup>, Devrim Bulut <sup>1</sup>

#### **Abstract**

Introduction and Purpose: According to Karasık (2009) and Beard (2007) the evaluation of field experience is an important data source also for the evaluation of academic programs. Because understanding which theoretical knowledge students use for a sport management related task during this process also provides the opportunity to evaluate sport management education programs. Certainly it cannot be claimed that the field experience feedbacks on its own are sufficient for the evaluation of the programs. However, field experience might be a way of seeing the connection between courses and practice, and it might be a way of understanding what academic programs provide and also a way of having a conclusion how a four year education program coincides with the needs of the business world. It is observed that some of the studies focus directly on the connection between courses and practice. For instance Clark (2003) asked business administration students to choose three courses and to describe how they benefited from these courses during their internship to be able to understand how theory reflects in practice. Karasık (2009) on the other hand suggests a question like "which one of the courses, concepts and models you learned did you benefit from during your internship and how did you use this knowledge?" to make an evaluation more significant. Based on this information the purpose of this study was to determine which theoretical knowledge Abant Izzet Baysal University (AIBU) Sport Management students used during their internship in other words which one of the courses they most benefited from.

**Method:** The study was a longitudinal and descriptive study. The study was conducted within the context of field practice courses in AIBU Sport Management between 2006 and 2013. Field practice is one of the compulsory courses in the Sport Management Department which was established in 2003 at AIBU. Since the very first time in 2006 each student must prepare and submit an evaluation report after field practice. In those evaluation reports students are amongst others expected to answer the question: "What courses did you most benefit from during field practice?". The research data was collected from the responses to that question.

Descriptive statistical techniques were used to analyze the data.

Results: Results indicated that students benefited from a total of 39 different courses including elective courses between the years 2006-2013 during the field practice. 25 of the courses were compulsory (C) and 14 were elective (E) courses. From these courses the following 10 benefited the most: communication between individuals and organizations (15.67%), computers (13.43%), management science (10.15%), sports management (9.40%), sports marketing (5.22%), the club structure management and problems (4.33%), public relations (3.13%), research methods (2.69%), general accounting (2.54%) and sports facilities planning and management (2.24%). All of the most benefited courses with the exception of public relations and club structure management and problems were compulsory courses. Among the most benefited courses which students listed; introduction to economics (C), life-long sports (C), disabled sports (C), sports law (C) mountaineering (E), trekking (E), graphic design and publishing (E), the sports industry (E), the first aid and rescue (E) and surfing (E) were at the end of the list and all scored 0.15%.

Conclusion and Recommendations: The research results showed that the most benefited courses during field practice were; communication between individuals and organizations, computer, management and sports management. It might be possible to connect the result that indicated communication being first place to many studies suggesting communication is one of the social skills which students gain by internship experience (Gault, Redington, and Schlager, 2000; Hong, 2008; O'shea and Watson, 2011, Surujlal and Singh, 2010; Sotiriadou, 2011). In this respect it can be said that communication is one of the most needed fields in sports management related tasks. Çoknaz (2013) determined in a study also conducted with the sport management students in AIBU that

<sup>&</sup>lt;sup>1</sup> Abant İzzet Baysal University School of Physical Education and Sports

students engaged extensively with tasks like correspondence and document preparation during their field practice. Therefore it makes sense that computer was one of the most benefited courses. Compared to other courses practical courses remained relatively behind with 0.15% and are considered to be not so much of use for sport management tasks. The most important limitation of this research was field practice taking place only in the 7<sup>th</sup> semester in the program. In this case the majority of the students were not be able to consider the courses of 7<sup>th</sup> and 8<sup>th</sup> semester when they were evaluating. Conducting the research once again with the same question but with graduate students would be helpful

**Keywords: Sport Management, Field Experience** 

### OP. 443 CONSUMER BASED BRAND EQUITY ON TRACKSUIT BRANDS

Yavuz Yıldız<sup>1</sup>, Alper Kinden <sup>1</sup>

<sup>1</sup> Celal Bayar University School of Physical Education and Sports

#### Abstract

Introduction and Purpose: Brands, they provide recognizing of product and if they drive effectively, then bring customer loyalty, willingness to pay more and competitive advantage, are valuable assets. Vazquez et al. (2002), define the consumer based brand equity as the benefits, which are derived from product usage of consumers and include functional and symbolic utility. There are considerably studies - detergents, Kamakura ve Russel (1993); Leuthesser (1995), toothpaste and mouthwash, Park ve Srinavasan, (1994), cars and TV, Pappu ve diğ. (2005) – in the literature related to brand equity on consumer products. Altough there is few studies related to like sport shoes (Buil et al. 2008; Koçak et al. 2007; Netemeyer et al. 2004; and Tong & Hawley, 2009; Vazquez et al. 2002; Yoo & Donthu, 2001), , it is not found, especially in Turkey, the studies related to brand equity on tracksuit brands. Aim of this study is to measure the brand equity on tracksuit and investigate the buying behaviors of the consumers related to tracksuit brands.

**Method:** The study group consists of 250 athletes, which is determined via convenience sampling method. Demographic questions and "Consumer Based Brand Equity Scale", was developed by Vasquez et al. (2002) and was proved the reliability and validity study of its Turkish form by Koçak et al. (2007), was administered to participants. The Cronbach alpha coefficient of the scale was found .87 in this study. In the analyses of data were used descriptive statistics, student t test and one-way analysis of variance.

**Results:** Results of the study has shown that the most preferred brands are orderly Adidas, Nike, Puma, and Reebok and that Adidas has highest brand equity. Consumer based brand equity is not different by gender, age, tracksuit usage purpose, tracksuit buying timing. However, it found that the consumer based brand equity is significantly different by number of holding tracksuit and payment (p<.05).

**Discussion:** Two brands, Adidas (% 56) and Nike (% 26) are preferred highly ratio. It is shown that these two brands are successfully than other tracksuit brands from the point of marketing and brand management. Indifferent of brand equity on tracksuit by gender can result from the same quality and functionality of tracksuit for men's and women's products. Consumer based brand equity can be not different by gender because the ages of athletes are very similar. Athletes wear their tracksuit during training and daily life. Even if there is no difference between the consumer based brand equity by (once in 6 months, 6-12 months, 12-18 months), consumer based brand equity increases, also the timing tracksuit buying decreases. This result show that the highest consumer based brand equity bring on frequently purchasing and customer loyalty. It found that the consumer based brand equity is significantly different by number of holding tracksuits. The perception of consumer based brand equity of athletes who has three and more tracksuits is higher than other athletes who have one or two tracksuits. This finding shows that the consumers purchase much more products, when they believe that brands have high brand equity (Ailawaldi ve diğ. 2003; Higgins, 2006; Raggio ve Leone 2007). It found that the perception of consumer based brand equity of consumers who pay 101 TL and more for tracksuit is higher than another consumers who pay 100 TL and below for tracksuit. Consumers,

evaluate brand equity highly, willing to pay more that brand. Consequently, it can be suggested that the higher consumer based brand equity enhance number of buying and willingness to pay more.

Keywords: Sport, Sportswear, Tracksuit, Brand Equity

#### OP. 444 OPINION OF PUBLIC FROM SPORTS SERVICES OF LOCAL AUTHORITIES

Yasin Tekin<sup>1</sup>, Oğuz Özbek <sup>1</sup>

<sup>1</sup> Ankara University Faculty of Sport Sciences

#### **Abstract**

**Purpose**: The purpose of this study, Kecioren municipality sports facilities that benefit the people of the region of the municipality is to examine their views on sports services.

Method: Descriptive method was used in the research. The scale developed in order to collect the data of the research was used. Five point likert type scale was used in the data collection tool. The measuring tool was applied to 500 people in total 260 of them being women and 240 being men. The validity and reliability of the measuring tool was examined through the preliminary application to 180 people. For the validity examination, the total correlation values of the item were inspected and factor analysis was performed. Before performing the factor analysis, Kaiser-Meyer-Olkin Measure (KMO) value was found in order to test the compliance the data with the factor analysis. The number of dimensions at the scale was determined depending on the explanatory factor analysis results. The result of the factor analysis gave four dimensions in the scale which were the Dimension of the Sports Service, Sports Management, Sport Facility Operation and Sports Facility Use. The reliability coefficient of the measuring tool was found to be .758. The normal distribution of the data was inspected and as the data was not normally distributed, non-parametric tests were used. Mann Whitney U test was applied for the double groups (sex) and Kruskall-Wallis test was applied for the groups of more than two components (age, education, income).

**Findings**: The participants of the research stated that they agreed with the statements "It is important for people to satisfy the physical movement needs" (x=4,  $06 \pm 9.80$ ), "There are units to carry out the sports activities at the municipal managements" (x=3,  $84 \pm 1.01$ ), "The sports tools present in the sports parks of the municipalities constructed in the districts are adequate in terms of kind" (x=3,  $69 \pm .996$ ) at the highest level. And they stated that they agreed with the statements "The trainers and coaches working at the courses of the sports facilities of the municipality are proficient in their jobs"( $x=3.14 \pm 1.11$ ), "The municipality carries out works to encourage the public to do sports" ( $x=3.01 \pm 1.14$ )" and "The toilets at the dressing rooms of the sports facilities at in hygienic condition" ( $x=3.19 \pm 1.18$ ) at the lowest level.

The average of the people using the sports facilities belonging to Keçiören Municipality in terms of dimensions were as follows; at the sports services level ( $x=3.54\pm.735$ ), sports management level ( $x=3.23\pm.763$ ), sports facility operation level ( $x=3.59\pm.712$ ) and sports facility management level ( $x=3.20\pm.873$ ). The participants expressed that their views about the management, operation, usage and services presented by the sports facilities of Keçiören Municipality were at moderate level.

There was not a statistically important difference in the result of the Mann-Whitney U Test analysis performed about the sports management (U=300.7, p>0.5) and using the sports facility (U = 309.9, p>0.5) depending on the sex of the participants. There was a meaningful difference in the result of the Mann-Whitney U Test performed about the sports services depending on the sex of the participants (U=268.4, p<0.5). The level of the views of the female participants was (x = 3.62) and the level of the views of the male participants was (x = 3.46). The female participants agreed with the sports service dimension at higher levels compared to the male participants. There was a meaningful difference in the result of the Mann- Whitney U Test analysis about the views of the participants regarding the sports facilities depending on their sex (U=278.4, p<0.5). The level of the views of the female participants was (x = 3.65) and the level of the views of the male participants was (x=3.53). The female participants agreed with the sports facility operation at higher levels compared to the male participants.

There was not a meaningful difference in the Kruskal- Wallis Test result regarding the views of the participants about Sports Services [ $X^2$  (2) = .709, p>.05], Sports Management [ $X^2$  (2) = 5.04, p>.05], Sports Facility Operation [ $X^2$  (2) = 2.81, p>.05] and Sports Facility Usage [ $X^2$  (2)=1.36, p>.05] as per the education levels of the participants.

There was not a meaningful difference in the Kruskal- Wallis Test result regarding the views of the participants about Sports Services [ $X^2$  (4) = 8.64, p>.05], Sports Facility Operation [ $X^2$  (4)=4.00, p>.05] and Sports Facility Usage [ $X^2$  (4)=6.94, p>.05] as per the income levels of the participants. There was not a meaningful difference in the Kruskal- Wallis Test result regarding the sports management dimension depending on the income level of the participants [ $X^2$  (4)=15.7, p<.05]. According to the Mann- Whitney U Test performed in order to find the group creating the difference; the participants having a monthly income of 800 TL and between 1851 - 2350 TL agree more with the sports management dimension compared to the participants with a monthly income between 1350-1851 TL.

There was not a meaningful difference in the Kruskal- Wallis Test result regarding the views of the participants about Sports Services [ $X^2$  (2) = 2.50, p>.05], Sports Management [ $X^2$ (2) = 3.35, p>.05], Sports Facility Operation [ $X^2$  (2) = 3.21, p>.05] and Sports Facility Usage [ $X^2$ (2) = 1.05, p>.05] as per the age of the participants.

**Result**: The participants of the research stated that they agreed with the statements "It is important for people to satisfy the physical movement needs", "There are units to carry out the sports activities at the municipal managements", "The sports tools present in the sports parks of the municipalities constructed in the districts are adequate in terms of kind" at the highest level. The participants expressed that their views about the management, operation, usage and services presented by the sports facilities of Keçiören Municipality were at moderate level. The female participants agreed with the sports service dimension and sports facility operation at higher levels compared to the male participants. The participants having a monthly income of 800 TL and between 1851 - 2350 TL agree more with the sports management dimension compared to the participants with a monthly income between 1350-1851 TL. There was no different between the views of the participants about Sports Service Dimension, Sports Management, Sports Facility Operation and Sports Facility Usage depending on their education and ages.

The public should be encouraged to attend to the activities more frequently in order for the local managements to improve their sports services, and the recreation and sports facilities shall be better introduced. The staff working at the sports units of the local managements should consist of educated people. The local managements should set up the recreation areas and sports facilities in order to increase the attendance to the sports.

Keywords: Sports, Sports Services, Sport Management, Local Government

# OP. 447 EVALUATION OF THE PHYSICAL ACTIVITY HABITS OF ACADEMIC STAFF EMPLOYED TO WORK ON UNIVERSITIES

Behlül Özdedeoğlu<sup>1</sup>, Hakan Sunay <sup>1</sup>

#### Abstract

**Purpose**: The purpose of this study is the evaluation and determination of physical habit of university academic staff.

**Method**: The universe of study constitute about 15,000 University academic staff from five universities; Ankara University, Hacettepe University, Middle East Technical University, Gazi University and Baskent University which provide education in Ankara. The sample of the study consists of 828 randomly selected academic staff cited in the universe. Questionnaire which is composed of four parts was used to collect data during research. In the first part participants were

<sup>&</sup>lt;sup>1</sup> Ankara University Faculty of Sport Sciences

asked questions for identifying information and and habits doing sports. In the second part, factors that have led individuals engaged in doing sports to sports, in the third part, reasons of not doing sports of individuals that do not do any sports, in the fourth part socializing effects of sport, five-point Likert-type questions were asked. Within the scope of validity and reliability of applied questionnaire, as a result of the reliability analysis, Cronbach's Alpha ( $\alpha$ ) internal consistency was determined by parts as; second part( $\alpha$ =0,854), third part ( $\alpha$ =0,712) and fourth part( $\alpha$ =0,936). In order to analyze the responses percentage-frequency techniques were used primarily, then to determine the difference between variables Mann Whitney-U and Kruskal Wallis analysis were applied.

Findings: Surveyed 828 academic staff, 499 (60.3%) were female, 329 (39.3%) were male. 60% of the total participants was determined to do sports. Research holds the title of most research assistant while attending academic staff, most individuals who participate in sports are individuals who have the title of professor. Most participants between the ages of 23-40 is the age range and do sports ratio declined with increasing age, income level rises, it was determined that the increased participation in sports. 80% of academic staff is happy to participate in sporting activities, while 58.9% of sector participation in sports has been determined that see it as very important. Academic staff at most have made their first five sporting events, respectively, 29.2% "Fitness activities", 15.1% "slow-paced runs", 12.3% "Weight training", 11.5% "recreational purposes walks" 11.5% "swimming" has been found to be. Academic staff into sports, the most important factors mean respectively "healthy living" (X = 4.37), "to be happy" (X = 4.07), "to lose weight / keep in form" (X = 3.89), Why do sports agents belonging to the respectively "Times could not find" (X = 3.55), "the course is more than the density" (X = 3.21), sports to socialize about the effects of substances in the "Sport makes individuals at peace with himself if" (X = 4.09), "sports training are beneficial to society individuals upbringing plays an important role" (X = 4.07), is in the form.

Conclutions: According to the results obtained during the study; it was determined that academic staff turn to sports primarily to be healthy and happy, then sequentially for losing weight / keeping in form, having fun / relieving stress, delaying aging, mental and personal development effects. Besides, it was determined that academic staff had difficulties in participating in physical activities because of not finding time and having a lot of lectures. Also, it was determined that academic staff participated in the study would be at peace with individuals engaged in sports, sports education plays an important role in raising individuals that are helpful to society and they attend to the high rate opinion that sport provides a positive contribution to the interaction between the people.

Keywords: Academic Staff, Physical Activity Habit, Sport

# OP. 453 THE ADMINISTRATIVE DIFFICULTIES ENCOUNTERED IN SEARCH AND RESCUE PROCESS AND LEADERSHIP

Zühal Kılınç<sup>1</sup>, Burak Gürer <sup>1</sup>, Müberra Çelebi <sup>2</sup>

#### Abstract

**Purpose:** The aim of this research is the examination of leadership skills and the difficulties encountered during the administrative process used in search and rescue operations. In this research, the difficulties and experiences, which are experienced in management by the team leader or successful manager worked as professionals in the field of search and rescue operations, were examined.

**Method:** In the research, "Phenomenological Approach" was used as qualitative research design and also "Interview Technique" was used as data collection method. In the selection of sampling, 'Criterion Sampling Method of Purposive Sampling Method' were selected. Some criteria were established in the selection of the participants. These were to have at least ten years experience as a manager in search and rescue operations in Turkey, to take part in at least five disasters and to gain experience, and to have the competence and document to manage search and rescue operations.

<sup>&</sup>lt;sup>1</sup> Batman University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Abant İzzet Baysal University School of Physical Education and Sports

**The Findings:** Research findings were collected as five general themes under the heading of administrative dimensions in the process of search and rescue. These themes were aim, structure, process, climate and leadership.

The Result: As a result of the research, organizational dimensions in the administrative processes should be considered as a whole. Leadership in search and rescue is a very important element that affects the process. In addition, as a result of the study, attention is drawn to the importance of dimensions such as 'problem solving, communication, teamwork, risk-taking, being reliable' in the development of the skills for 'effective leadership' which is an integral dimension of effective and successful search and rescue management. Also it is noted that these skills needed to be developed. In this research, attention is drawn to the administrative difficulties experienced by the one who involved in search and rescue process as business leader and their leadership skills. And in the future, they are thought to create a different vision in solving administrative problems, in search and rescue process and in the development of effective leadership.

Keywords: Search And Rescue, Administrative Difficulties, Leadership Skills

# OP. 470 THE EFFECTS OF INTENSIVE EXERCISE FOR EIGHT WEEKS ON SOME HORMONES IN BASKETBALLERS

Recep SOSLU<sup>1</sup>, Yıldırım KAYACAN<sup>2</sup>, Hamit KAVURMACI<sup>3</sup>, <u>Yücel MAKARACI</u><sup>2</sup>, Ali ÖZKAN<sup>4</sup>, Ali Ahmet DOĞAN<sup>5</sup>

- <sup>1</sup> İbrahim Çeçen University School of Physical Education and Sports
- <sup>2</sup> Ondokuz Mayıs University Yaşar Doğu Faculty of Sport Sciences
- <sup>3</sup> Atatürk University School of Physical Education and Sports
- <sup>4</sup> Bartın University School of Physical Education and Sports

#### Abstract

Physical activity is a period that completed with energize as a result of body's movement by means of skeleton muscles. The stress occurring in metabolism with exercise; regulates with holding steady of homeostasis by some autonomous systems. This period has been affecting lots of physiologic parameters. Many study shows that physical activity is affecting endocrine system.

The study aims to investigate the effects of intensive exercise programme for eight weeks on C - Peptit, Progesterone, Free Androgen Index (FAI), Prolactin, Follicle Stimulating Hormone (FSH), Luteinizing Hormone (LH), Testosterone, Cortisol, Growth Hormone (GH), Insulin and Adrenocorticotropic Hormone levels in 12 basketballers (20 - 25 age) play actively in Turkish Men's Basketball Regional League.

The mean age were 20±1.5 years and the mean height 194±4.50 cm in athletes participated to the study. As practice of exercise; during 8 weeks / 6 days / 2 hours intensive aerobic exercise program has applied to athletes. Totally about 10 cc blood samples were taken 2 times at pre and post-exercise from subjects. At two periods, C - Peptit, Progesterone, Free Androgen Index (FAI), Prolactin, Follicle Stimulating Hormone (FSH), Luteinizing Hormone (LH), Testosterone, Cortisol, Growth Hormone (GH), Insulin and Adrenocorticotropic Hormone levels were analyzed. Arithmetic means (X) and standard deviations (Sd) of the all data were calculated. SPSS v.21 is used to determine the different between parameters. Paired Samples T Test is used in data which are homogen. By selecting %95 confidence bounds, the values under p<0.05 are considered significant.

As a result; after intensive exercise programme for eight weeks, except growth hormone (GH), on the all hormones measured mean increment was found. On the progesterone, FAI,

<sup>&</sup>lt;sup>5</sup>Kırıkkale University School of Physical Education and Sports

LH, cortisol levels significantly differents were found during pre and post exercise (p<0.05). Also on the levels of C- Peptit, Follicle Stimulating Hormone, Insulin, Adrenocorticotropic Hormone, mean increment was found altough significantly different was not.

Keywords: Exercise, Hormone, FSH, LH, Progesterone

# OP. 475 THE RELATIONSHIP BETWEEN THE FAN IDENTIFICATION LEVELS AND THEIR ATTENDANCE TO SPORT

Yavuz Y<u>ıldız</u><sup>1</sup>, Armağan Yalırgav <sup>1</sup>

<sup>1</sup> Celal Bayar University School of Physical Education and Sports

#### **Abstract**

**Introduction and purpose:** Commercial transformations of football clubs cause to fans are being seen as consumers. Identified with their team and loyal fans support their team in tribun also matchday expenditure. Fan identification and spectator attendance are goals of sport marketers. Aim of this research is to investigate the effects of fan identification on spectator attendance to sport.

Method: Stadiums, where football team brands are transformed tangible products, offers expectations to fans (Yıldız, 2010). Therefore, research data was gathered from fans in stadiums. The study group is 178 Karşıyaka, Göztepe ve Bucaspor supporters. In this research, two scales were used to data gathering. First scale is "Scale of Spectators' Decision to Attend" developed by Gencer & Aycan (2008) and includes 6 factors with 24 items. The Cronbach alfa coefficient of this scale was found .88 in this study. In order to measure fan identification, "Sport Spectator Identification Scale" was used. This scale was originally developed by Wann & Bromscobe (1993) and was proved with reliability and validity study of its Turkish form by Günay & Tiryaki (2003). The Cronbach alfa coefficient of the scale was found .93 in this study. In the analyses of data were used descriptive statistics, student t test, one-way analysis of variance and correlation analysis.

**Findings:** In this research, it's found that males fan identification is higher than females fan identification. Attendance to sport is not different by gender. There is significantly difference between the teams by attendance to sport. Bucaspor fans spectator attendance level is higher than Göztepe fans spectator attendance level. Fan identification is not different by fans perceptions of ticket prices, which is described cheap, fair price and expensive. However, the decision of attendance to sport of fans, who evaluate the ticket price is fair price, is higher than other fans, who evaluate the ticket price is cheap. It is found that the identification of fans, watch the game in stadium, is higher the identification of fans, who watch the game in home or café. Another result of this study is shown that there is positive relationship between fan identification and spectator attendance.

**Discussion:** Fan identification of males is higher than fan identification of females. Rather than females, males have more opportunities for playing and watching football. Such that many males evaluate their team as a part of own personality. Violence and abuse in stadiums may be a reason why females lightly attendance to sport. According to ticket price perceptions of fans, fan identification is not different. This finding explains that highly identified fans don't care about ticket price. On the other hand, level of attendance decision to sport of fans, evaluate the ticket price is plausible, is higher than level of attendance decision to sport of fans, evaluate the ticket price is cheap. There is a positive relationship between fan identification and spectator attendance to sport. This result shows that the identified fans support their teams mostly in stadium as far as possible.

Keywords: Sport, Football, Fan Identification, Spectator Attendance

# OP. 514 EXAMINING THE OCCUPATIONAL EXHAUSTION AND THE ORGANIZATIONAL COMMITMENT OF FOOTBALL COACHES

Yeliz Şirin<sup>1</sup>, Pervin Bilir <sup>2</sup>, Levent Sangun <sup>3</sup>, Günseli Öz <sup>4</sup>

- <sup>1</sup> Kahramanmaraş Sütçü İmam University School of Physical Education and Sports
- <sup>2</sup> Çukurova University School of Physical Education and Sports
- <sup>3</sup> Çukurova University Adana Vocational Schools
- <sup>4</sup> Kipas Private Primary School

#### **Abstract**

**Aim:** The aim of this study consists of the football coaches' exhaustion level according to their jobs and organizational commitment in which they work are determined by their age, civil statues, income level, educational statues, football experience, period of coach experience and work in an amateur or professional team.

**Method:** The sample of the study is 90 football coaches that attend "Regional Football Coaches Improvement Seminar of Turkey's Football Coaches Institution" that take place in Kahramanmaraş in June 2014. The data of the exhaustion level is gathered by the "Organizational Commitment Scale" the improvement of which was done by Allen and Meyer (1990) and translated into Turkish by Demirkiran in 2004; and the exhaustion scale of Pines and Aranson (1988), the reliability and validity study of which was done and shortened by Maslach-Pines (2005). Because the data was not in normal range, nonparametric tests were used. In dual comparisons, the U Test of Mann Whitney; in more than dual group comparisons, the H test of Kruskal Wallis were applied.

**Findings:** According to the study discoveries, no meaningful differences were found out in dimension of organizational commitment or exhaustion level according to the differences of statues of duty in the club, the past experience of football before being a coach, civil statue or age. The meaningful difference among educational statue, continuance commitment and the condition of exhaustion was found out as (p<0,01). The meaningful difference among income level, emotional commitment, normative commitment and exhaustion level was found out as (p<0,05). The meaningful difference in exhaustion level according to differences of the category that a coach serves and the time period of serving in the club was found out as (p<0,05).

**Results:** Among the football coaches, the exhaustion experience of the ones that graduate from primary, secondary and university and that have low income with the ones that has been working more than ten years; it was found out that the continuance commitment of the ones that graduate from primary and high school was low and that the emotional and normative commitment of the ones with high income was high.

Keywords: Football, Coach, Exhaustion, Organization Commitment

# OP. 656 THE IMPACT OF GLOBALIZATION IN FOOTBALL: THE LAWS OF THE GAME OF FOOTBALL IN THE ROAD TECHNOLOGY

Lale Orta<sup>1</sup>, Murat Yalçın Beşiktaş <sup>1</sup>

#### Abstract

**Objectives**: The aim of this study, to identify the created changes of globalization, which has an effect widely over the World since the 1980s, on the Game Rules of Football.

**Methods**: In this study, the changes that have been made since 1980 in the Game Rules of Football will be explored in terms of the relationship of globalization and technology. In our study, the source scan technique is used, irrelevant resources have been scanned, and evaluation was made. In this study aimed to review of the relationship between globalization, technology, and football, the necessary data is written, printed and based on internet resources. Therefore, globalization, technology, and football-

<sup>&</sup>lt;sup>1</sup> Okan University School of Applied Sciences

related resources were scanned.

**Results**: Football the rules of the Game to be systematized and published in 1896, respectively. Thus, all the rules of football in the world in terms of creating common the public harmony. The rules of the game to the conditions of a globalized world, and compliance with the changes in order to provide for maintaining popularity and the World's number one sport, or a number of sports as over the years to ensure the continuation of the Game of Football radical changes in the laws have become mandatory. Frequent alteration of the rules of the game, with the referee to increase the error, together with the globalization of industrialized football, the lost economic value of is too high, the football more transparent and reliable making the request and the referees in this challenging task by providing technological support, the opinion and the results revealed.

Conclusions: Managing Football matches successfully for reduction of error rates and bringing standard management approach for development, without technological assistance is not possible. In many countries, even high-level professionalization of refereeing is not eliminate the human error factor. The scientific researchs are also supports this idea. At Football; unless the absence of error is not possible without using video technology. Technological assistance on specific errors can be helpful both for referee and teams. Today's football, the decision on how much video technology should be used in football must be cleared after applying on an important official football tournament or at a league of a selected pilot countries. Perhaps after using video technology in a pilot league or tournament, there will be realised that football is more beautiful with errors and the conclusion to be reached once more, and the technology in football will not be allowed to enter.

Key Words: Globalization, Football, The Laws of The Game, Technology

# OP. 664 INVESTIGATING ORGANIZATIONAL JUSTICE PERCEPTIONS OF PROFESSIONAL FOOTBALLERS FROM THEIR DEMOGRAPHIC CHARACTERISTIC'S POINT OF VIEW

### Hayri Aydoğan<sup>1</sup>

#### **Abstract**

**Purpose**: The purpose of this study, is to investigate organizational justice perceptions of professional footballers from their demographic characteristic's point of view.

**Method**: In this study, correlational and causal comparative methods were used. The sample of this study consists of 780 professional soccer players of 41 professional soccer club. Footbalers who are playing at Spor Toto Super League, Bank Asia Premier League, Spor Toto Second League and Spor Toto Third League on 2010-2011 season of Turkish Football Federation and they were selected by random selection method. In study, footballers were applied ''Demographic Information Forms'' and ''Organizational Justice Perception Scale'' which were prepared by researchers. Demographic Information Form consists of some questions like; age, place of birth, date of birth, marital status, eduacation level, total professional game experience, playing position, annual income, and which league category they played in Turkish Football Federation (TFF).

Organizational Justice Scale was developed by Niehoff and Moorman (1993), and its validity and reliability study were adopted to Turkish by Yıldırım (2002). The original form of Organizational Justice Scale consists of 20 articles and 3 sub-dimensions. These sub-dimensions are distributive justice, procedure justice, and interaction justice.

**Findings**:According to analyses carried out; it was determined that there were significant differences between organizational justice and age levels of professional footballers (F=3,143, F=8,808, F=3,645; p<0.05). According to these results obtained; in the 3 sub-dimensions of organizational justice, footballers who are 15-19 age, have more significant results compared to other elder age categories.

As a result of an another analyse; It was determined that, professional footballers have significant difference (t=2,084, p<0.05); between groups in the sub-dimension of "distributive justice" from the point of their marital status according to organizational justice; and there was no significant difference

<sup>&</sup>lt;sup>1</sup> Gümüşhane University School of Physical Education and Sports

from the point of other sub-dimensions. When we look at the difference of significant resource, it was determined that married participants have (X=17,1043) more significant organizational justice scores than single ones (X=16,4021).

According to the analyse results; it was determined that there is a significant difference between organizational justice perceptions and professional game durations of professional footballers. (F=3,817, F=5,196; p<0.05). Accordingly; while an experience at a dimension of organizational justice conception shows that experience cause an increase at justice perception, it is seen that it decreases at an another dimension. Starting from this; as long as football players have more experience depending on age, their point of view for distributive justice become more comprehensible, however it can be seen that their procedure justice decreases as their experiences increase.

According to an another analyse result, it was determined that there are some significant differences between their organizational justice perceptions and income variables; and these differences show up from distributive justice (F=10,974, p<0.05) and interaction justice (F=2,475, p<0.05) which are from sub-dimensions of organizational justice perception.

In addition; it was determined that, there were no significant difference between organizational justice perceptions and position variable, education level variable and place of birth variables.

**Result**: Consequently; there is a lot of significant relationship between demographic characteristics, organizational justice perceptions and sub-dimensions of organizational justice perception.

Keywords: Organizational Justice, Professional Footballer, Demographic Characteristics

#### OP. 689 EXAMINING UNIVERSITY STUDENT'S LEVELS OF WORK VOLITION

Volkan Unutmaz<sup>1</sup>, R. Timuçin Gençer <sup>1</sup>

#### **Abstract**

**Purpose**: The purpose of the study was to examine the university students' levels of work volition in terms of various variables.

**Method:** The study was conducted with 114 female (28.8%) ve 282 male (71.2%) total 396 university students studying at Physical Education and Sports School. The Work Volition Scale-Student Version which consists of 16 items under two subscales, developed by Duffy, Diemer and Jadidian (2012) and adopted into Turkish by Unutmaz and Gençer (2014), was used as measurement tool in this study. Descriptive statistics, t-test and one way Anova was applied to obtained data.

**Results**: The gender (female = 114 [28.8%]; male = 282 [71.2%]), age (22 and under = 201 [50.8%]; 23 and over = 195 [49.2%]), department (physical education and sports teaching = 135 [34.1%]; sports management = 145 [36.6%]; coaching education = 116 [34.1%]) and grade (first = 79 [19.9%]; second = 82 [20.7%]; third = 84 [21.2%]; fourth = 151 [38.1%]) were considered as demographic variables of the participant students. In terms of gender of the students, applied t-test results shows that there was no significant differences (t= 1.074; p>.05) in volition subscale, however female students have significantly higher means (t= 3.586; p<.01) in constraints subscale. Applied t-test results show that there was no significant mean difference in subscales in terms of student's age. ANOVA results shows that there were significantly differences in volition (F = 3.863; p<.05) and constraints (F = 7.798; p<.01) subscales in terms of departments. The results of ANOVA shows that there was significant mean differences in volition subscale (F = 3.324; p<.05), however there was no significant differences in constraints subscale (F = .147; p>.05) in terms of grade.

**Conclusion:** The results of the study show that students' level of work volition could be various in terms of gender, department and grade. However no differences were found in terms of students' age.

Keywords: Students, Work Volition, Career Development

<sup>&</sup>lt;sup>1</sup> Ege University School of Physical Education and Sports

# PP. 12 TURKISH NATIONAL SKI TEAMS (ALPINE AND NORDIC) OF THEIR ANTHROPOMETRIC AND PHYSIOLOGICAL CHARACTERISTICS COMPARISON

<u>Vahdet Alaeddinoglu</u><sup>1</sup>, İsmail Kaya <sup>2</sup>, Hüseyin Eroğlu <sup>3</sup>, Sinan Çemlek <sup>4</sup>

- <sup>1</sup> Atatürk University Horasan Vocational School
- <sup>2</sup> Dumlupınar University School of Physical Education and Sports
- <sup>3</sup> Kahramanmaraş Sütçü İmam University School of Physical Education and Sports
- <sup>4</sup> Ministry of Youth and Sport Erzurum City Youth and Sport Directorate

#### **Abstract**

The aim of this study is to search the anthropometric and physiological features of young male skiers who involve in Turkish National Ski Team and the explosive power, strength and body for proportion of sportsman, too. 15 sportsmen on Nordic Discipline, 13 sportsmen on Alpine Discipline chosen for National Team Power building camp, organized between 15-30 November 2011, attended to this test. While measurement is taken, anthropometric and physiologic parameters have been compered according to training program of Ski National Team. According to measurement, the age average of Cross Country skiers is determined as 19,5±2,3 and the age average of Alpine Discipline skiers as 20,5±3,5. The average weight of Cross Country skiers is determined as 67,1±5,1 kg and Alpine Discipline skiers as 66,8±10,1 kg. The average size of Cross Country is 173,8±6,76 cm and Alpine Discipline skiers is 173,7±6,59 cm. In physiologic assessment, pectoral fat rate of Alpine skiers is determined as 6,29±1,01mm, Cross Country skiers? 5,79±2,08 mm. Biceps fat rate of Alpine Discipline sportsmen is 4,3±0,38 mm, Cross Country skiers is 3,2±1,13 mm. According to physiologic measurement, femoral measure of Alpine Discipline skiers is 51,8±2,64 cm, Cross Country skiers is 49,7±5,52 cm. The data is rendered through SPSS 17,00 program. In determining the differences between two groups, ?=0,05 level of significance t-test was applied. Besides, the standard deviations and averages are evaluated by analyzing. The result of the researches showed that there are physiologic and anthropometric differences between two branches. These differences are thought to have resulted from the different exercise and competition circumstances. Test result showed that depending on Nordic and Alpine Discipline branches, there are significant differences among the groups? explosive power, endurance and body fat percentages. The finding in this study signified that exercise programs? ski disciplines is effective on explosive power, endurance and body fat percentages.

Keywords: Alpine Skiing, Nordic Skiing (Cross Calpine Skiing, Nordic Skiing (Cross Country) Skiin...ountry) Skiing, Slalom, Sprint Racing, Performance, Anthropo

# PP. 17 THE COMPARISON OF THE CHILDREN GROUP'S RESPIRATORY PARAMETERS BETWEEN 10-14 AGE WHO ENGAGED IN THE SPORT OF SWIMMING

 $\underline{\mathsf{Fatih}}\, \underline{\mathsf{Özg\"ul}}^1$ , Murat Eliöz $^2$ , Aynur Otağ $^1$ 

- <sup>1</sup> Cumhuriyet University School of Physical Education and Sports
- <sup>2</sup> Ondokuz Mayıs University Faculty of Sport Sciences

#### Abstract

The aim of this study is comparing the group's respiratory parameters which included 10 - 14 age children who involved in the sport of swimming according to the measurements at the beginning and the end of the 8 week swimming exercise and to investigate the effects of the swimming branch on the lung capacity.

30 child athletes who can swim were used for this study. Respiratory values were measured by portable pony spirometry Cosmed brand before the study period. Respiratory values of these children swimming 3 days in a week and 1,5 hours in a day were mesured again after the 8 weeks study period.

Obtained data as; Best-FVC, Best-FEV1, FVC, FEV1, PEF1/s, PIF1/s, FEV1/FVC%, FEF25-75 1/s, Vmax-25 1/s, Vmax-50 1/s, Vmax-75 1/s and FET100% s was compared.

When the first and last measured values of the swimmers compared; Best-FVC, Best-FEV1, FVC, FEV1, PIF1/s, FEV/FVC%, FEF25-75 1/s, Vmax-50 1/s, Vmax-75 1/s and FET100% a statistically significant difference couldn't be found between the values. PEF 1/s values were significantly higher than the first measurement values in statistical size (p < 0.05). The Vmax-25 1/s values are also significantly higher than the first measurement (p < 0.05).

As a result, it was observed that regularly swimming trainings for 8 weeks on the 10 - 14 age group children provide a positively rising on the children's respiratory parameters. It has been found that swimming improves the lung functions of these children. Some of the increase on the respiratory parameters shows the impact of the swimming on the children's respiratory function.

Keywords: Respiratory Parameters, Children at 10 – 14 Age Group, Swimming

# PP. 28 THE EVALUATION OF ANAEROBIC POWER VALUS AND SPRINT PERFORMANCES OF FOOTBALL PLAYERS PLAYING IN DIFFERENT POSITIONS

Mehmet Yalçın Taşmektepligil <sup>1</sup>, Oğuzhan Arslan <sup>2</sup>, <u>Egemen Ermiş</u><sup>3</sup>, Hamza Küçük <sup>3</sup>

### **Abstract**

The purpose of this study is to compare the anaerobic power values and sprint performances of amateur football players of different positions. A total of 40 players from Samsunspor and Kadıköyspor football clubs participated in the study. The players were grouped in four according to positions as goalkeeper (5), defense (10) midfield (17) and forward (8). Age, sport age, height, vertical jump, peak power, average power, minimum power and fatigue index were not found to be significantly different between groups (p>0,05) while there were statistically significant differences between weight, 20 m sprint and 30 m sprint and 50 yard sprint averages (p<0,05). In addition, as a result of the correlation test, a significant positive association was found between 20 m, 30 m, 50 Yard (45,73 m) sprints while a negative association was found between sprints and vertical jumps (p<0,01), sprints and peak power (p<0,05).

Keywords: Wingate, Football, Anaerobic Power, Sprint

### PP. 41 ASSESSMENT OF IRISIN LEVELS IN SPORTIVE AND SEDENTARY MEN

Tuğba Arkan<sup>1</sup>, <u>Aksel Çelik</u><sup>2</sup>, Mehmet Çalan<sup>1</sup>, Erkan Günay<sup>2</sup>, Dilek Çımrın<sup>3</sup>, Fırat Bayraktar<sup>1</sup>

### **Abstract**

Introduction: Obesity due to excessive eating and physical inactivity has become a serious health problem, which seems to become an epidemic, particularly in industrialized countries. Every year, millions of premature deaths due to diseases related to inactivity are reported to occur. Increasing presence of diabetes and obesity in the world, has led to a large number of research studies to illuminate the pathophysiology related to insulin resistance and metabolism. In particular, it was aimed to expose the factors that may cause insulin resistance, for the development of new treatment

<sup>&</sup>lt;sup>1</sup> Ondokuz Mayıs University Yaşar Doğu Faculty of Sport Sciences

<sup>&</sup>lt;sup>2</sup> Ministry of National Education Fazıl Ahmet Paşa Secondary School

<sup>&</sup>lt;sup>3</sup> Ondokuz Mayıs University Faculty of Sport Sciences

<sup>&</sup>lt;sup>1</sup> Dokuz Eylül University Endocrinology and Met Diseases

<sup>&</sup>lt;sup>2</sup> Dokuz Eylül University School of Sport Sciences and Technology

<sup>&</sup>lt;sup>3</sup> Dokuz Eylül University Biochemistry

modalities. The effects of muscle tissue particularly on insulin resistance was not exactly known, in the pathophysiology of diabetes so far. It has been demonstrated in numerous cell culture and animal studies conducted recently that, irisin peptide which is released from muscle cells, and acts as a messenger between muscle and adipose tissues plays an important role in the insulin resistance and regulation of energy metabolism. This molecule is anticipated to open new horizons in the treatment of metabolic syndrome and obesity in the future. Objective: In our study, we will investigate if there is a relationship between exercise and serum level of the irisin among young and healthy individuals or not. Method: In the period between June - August 2013, healthy male soccer players who have had applied for performance assessment as well as male patients who reported no active sportive history and applied at the internal medicine and endocrinology departments of Dokuz Eylul University for various symptoms but with no significant health problem detected were included in the study. Results: A total of 50 subjects, consisting of 26 healthy sedentary men and 24 active male soccer players, were included in the study. Data of sedentary and sportive subjects were compared with Mann Whitney U test. There was no statistical difference with respect to mean age, height, weight, BMI, waist circumference, waist-hip ratio (p = 0.102, p = 0.678, p = 0.762, p = 0.952, p = 0.209, p = 0.222), Values indicating insulin resistance and metabolic status (insulin level, HOMA index, body fat ratio, triglyceride levels) were found significantly higher in the sedentary group compared to sportive group (p < 0.001, p < 0.001, p < 0.001, 0.002). With regard to the irisin levels, significantly higher irisin values were detected in the actively exercising sportive group (p=0,020). Relationship of irisin with other variables was examined using Pearson's correlation analysis, and a relationship was detected only between serum irisin and LDL-C levelsA significant positive correlation was determined between LDL-C levels and irisin (r = 0.341, p = 0.017). Conclusion: The opinion that muscle cells produce and secrete some hormonal factors dates back to the the years before the fat tissue was recognized as a an endocrine organ. Half a century ago, researchers have identified a hormonal factor that is released from muscle cells in response to the need for increased glucose caused by contractions. This factor was at first called as "exercise factor" or "activity factor", when the relevant information was still insufficient. As a result of different studies, it has been shown that this factor was not unique, but a large number of factors exhibiting hormonal effects were released from muscle cells. It was interpreted that contracted skeletal muscle can contact with adipose tissue as well as the other organs such as liver, cardiovascular system and the brain, in this manner. In our study, we observed that irisin protein levels secreted from muscles were statistically significantly higher and insulin resistance indicators were significantly lower in the sportive group, as expected. Interestingly however, when the variables that can affect the irisin level were evaluated individually, no statistically significant difference was found between irisin and insulin resistance. Our studies on this topic are still in progress, and we believe that further studies are required to be carried out to reveal the effects of exercise on the level of the irisin.

Keywords: Exercise, Irisin, Insulin Resistance

# PP. 42 EXAMINATION OF MENSTRUAL PHASES ON ATHLETIC PERFORMANCE IN FEMALE

Mine Akkuş <sup>1</sup>, Muhsin Hazar <sup>2</sup>, Malik Beyleroğlu <sup>1</sup>, <u>Seda Yalçın</u> <sup>1</sup>, Merve Uca <sup>1</sup>

### **Abstract**

The purpose of this study was to determine the effect of menstruation on strength, speed and endurance performance in female. 30 female athletes taking education at Elazig Sport High School and doing licensed athleticism and volleyball sport participated to study. 100 meters speed test in measurement of speed performances, push-up and shuttle in measurements of strength, 12 minutes-Cooper endurance running in measurement of endurance were used. Repeated measures in SPSS 15.0 for Windows package program was used in analysis of data obtained. It was established that strength, speed, strength and enduance parameters were differentiated in different menstruation phase, and there

<sup>&</sup>lt;sup>1</sup> Sakarya University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Gazi University School of Physical Education and Sports

differences were statistically significantly (p<0,05). As a result, it was established that menstruation phase effects strength, speed and endurance performance at 15-18 age group athletes doing athleticisim and volleyball sport.

Keywords: Female and Sport, Menstruation, Athletic Performance

# PP. 43 ANALYSIS OF THE HOME AND AWAY PERFORMANCE OF A TEAM IN REGIONAL BASKETBALL LEAGUE

Onur Metin<sup>1</sup>, Kemal Göral <sup>1</sup>, Özcan Saygın <sup>1</sup>

### Abstract

**Aim:** The aim of this study is to examine 10-week season performance of Bodrum Sport basketball team competing in Turkey Men's Regional Basketball League in terms of different variables.

**Method:** Data was collected by using video camera and analyzed by using paper and pencil method. Collected was analyzed in SPSS and interpreted by applying frequency test. Performance in home and away matches, 2, 3 and free throw, assist, turnover, and offensive board in attack, defensive rebound, pickpocket, turnover, block, foul, opponent foul, and opponent offensive board were the variables examined.

**Findings:** According to findings, while Bodrum Sport played with the average of 69.9 point in a home match, this average stayed as 66.6 in an away match. While the highest basket in home matches was reached in the last period (19.0), the lowest was reached in the first period (16.2); the highest basket in away matches was reached in the first period (19.2), the lowest was in the third period (12.8). Three-point field goal average in away matches (23.2) was found to be higher than the one in home matches (20.8). While assists in a home matches were found to be 22.6, those in away matches stayed as 19.0. Turnover in home matches was found to be higher while block performance was found to be equal in both home and away matches. Foul averages in home and away matches were found to be 18.2, 15.4, respectively. The averages of fouls done by opponent in home and away matches were found to be 17.8, 18.6, respectively. Offensive boards in home and away matches were found to be 30.8 and 35.0, respectively. Defensive rebound in home and away matches were found to be 30.8 and 35.0, respectively.

**Result:** Consequently, it has been found that %80 of the home matches was won while %60 of the away matches was won. Although some variables seemed to be high in away matches, it can be said that having high scores in home matches showed that the team used ad court.

Keywords: Basketball, Home, Away, Analysis.

# PP. 54 THE EFFECTS OF 8-WEEK BODY WEIGHT STRENGTH TRAINING ON 100 METERS FREESTYLE SWIMMING PERFORMANCE OF 11-12 AGE GROUP ATHLETES

Burçak Keskin<sup>1</sup>, Osman Ateş <sup>2</sup>, Özge Benzer <sup>3</sup>

### **Abstract**

The purpose of the 11-12 age group research land force enhances the training 100 m. swimmer. Examine the impact of migration levels.

Participating in the research as a source of data in research, fat, weight, body mass made athletes index measures, fathom lengts, balancing measures, sit and reach, and zipper test, hand claw strength test

<sup>&</sup>lt;sup>1</sup> Muğla Sıtkı Koçman University School of Physical Education and Sports

<sup>&</sup>lt;sup>1</sup> İstanbul University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Ministry of National Education Modafen Elementary School

<sup>&</sup>lt;sup>3</sup> İstanbul Academy College Swimming Coach

and 100 m athletes, transition periods are used.

Research of Galatasaray Sports Club, and actively participated in the 11 women's sports that 9 men's swimming. Physical measures and 100 m. of the participants. After 8 weeks the transition grades. The trainin program as scheduled at the end of the 8 weeks, and 100 m. athletes physical measurements. Switch ratings were taken again.

Swimmer percentage of body fat, and basal metabolism is applied to land is expedient, as determined by the positive impact the speed of the body composition, we find the flexibility, but we left Paw Paw on the strength of the force.

Keywords: Land Training, Balance, Stretching, exercises, Swimmer

# PP. 56 THE ANALYSIS OF GOALS SCORED IN THE 16-ROUND OF 2014 FIFA WORLD CUP

Erhan Işıkdemir<sup>1</sup>, Olcay Mülazımoğlu <sup>2</sup>, Yakup Akif Afyon <sup>2</sup>, Mehmet Dallı <sup>2</sup>, Şenol Yanar <sup>2</sup>

### Abstract

**Aim:** The objectives of present study analyze and evaluate of style, place and ball contact number in goal shots of the players who scored goals in The 16-Round Matches of 2014 FIFA World Cup.

Method: 18 goals scores in 8 matches played in groups in 2014 World Cup organized in Brazil by FIFA (International Federation of Association Football) were evaluated. The scored goals were grouped into three categories in terms of ball contact style; "Scored in Single Contact (SinC)", Scored in Two Contacts (TwoC)", and "Scored in Three or More Contacts (ThreeC)". The place where the goal was scored was categorized according the place of last contact as "In Penalty Area (IPA)" and "Out of Penalty Area (OPA)". The scoring style was evaluated under 4 categories as; "Foot Shot, Head Shot, Penalty Kick and Own Goal". The matches played were recorded from TV and loaded into computer to analysis packaged software. The goals scored in matches were analyzed using notation technique on computer. "eAnalyze Soccer" (produced by E-spor Digital Co. Ltd. Ankara) match analysis program was used for analyses. Matches were analyzed separately and data related to the variables of ball contact number, goal kick style and goal kick place of the players who scored the goal. Frequencies and the percentages of the variables were defined and presented.

**Findings:** According to the data, a total of 18 goals were scored in played 8 matches. The distribution of these goals in terms of ball contact numbers is as follows: SinC=12 goals (66.67%), TwoC=2 goals (11.11%), and ThreeC=2 goals (11.11%); and in addition 1 goal was detected as own goal (5.56%) and penalty kick (5.56%). Distribution of the goals according to the goal kick place is as follows: IPA=13 goals and OPA=3 goals (excepted goals of penalty kick and own goal). Examination of the ball contact number according to the place of goal kick revealed that, 9 of the goals among 13 goals kicked IPA were foot shots, 1 of the goal was head shots with single contact; 2 of the goals were scored with two contacts and 1 of the goal was scored with three or more contacts. Among the 3 goals scores OPA; 1 of the goal was scored with single contact, 1 of the goal was scored with two contacts and 1 of the goal was scored with three or more contacts. Distribution of the goals according to shot style is as follows: foot shot=15 goals (83.33%), 1 goal (5.56%) for each individual, head shot penalty kick and own goal. Scored more goals, it is seen that inside the penalty area, contacted with only single foot kicks.

**Result:** The number of goals scored in World Cup 16-round matches with single ball contact has a high percentage (about 80-85%), also with single foot kicks and inside penalty area; which reveals the importance of scoring goals with single contact. In this regard, important factor determining the outcome in soccer, the "goal" to achieve athletes should take the position to cover more of the penalty area and one-contact goal will be to advantage them. In addition, athletes should care about their work goal kick in training. The result of present study showed its important issue is single contact to make

<sup>&</sup>lt;sup>1</sup> Muğla Sıtkı Koçman University Institute of Health Sciences Department of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Muğla Sıtkı Kocman University School of Physical Education and Sports

goals work. Coaches should care about these issues when planning the practice for athletes.

Keywords: Soccer, FIFA 2014 World Cup, 16-Round, Goal Analysis, Number of Ball Contact

# PP. 73 RELATIONSHIP BETWEEN ANAEROBIC PERFORMANCE AND VERTICAL JUMP PERFORMANCE IN ADOLESCENT ATHLETES

### Hayriye Çakır-Atabek<sup>1</sup>

<sup>1</sup> Anadolu University Faculty of Sport Sciences

### **Abstract**

**Purpose:** Sports performance professionals and sports scientists have been focused on performance assessment; however there are lacks of research examining the relationships between various motor skills. While some studies have investigated the relationship between different physical performance variables (anaerobic performance, vertical jump performance, sprinting ability etc.) an insufficient number of studies have been conducted on track and field adolescent athletes. However the participation of children and adolescents in competitive sports has increased recently. Knowledge of the power outputs and jumping height would, therefore, be useful in terms of coaching, and it would be very vital in controlling the outcomes from the training programs. Thus, the purpose of this study was to investigate the relationship between Wingate anaerobic test (WAnT) performance and vertical jump performance in adolescent track and field athletes.

Methods: 24 amateur track and field athletes of the sports high school participated in this study (n=13 males; n=11 females; mean age: 15.79±0.83 years; height: 166.78±9.77 cm; weight: 57.44±13.42 kg; BMI: 20.45±3.01 kg/m²; body fat percentage (%): 18.80±5.55). All participants were the member of the same team competing in the national league and trained at least ninety minutes in a day for six days per week. The study was conducted in two parts over a week period. Anthropometric data collection and evolution of maximal oxygen uptake (VO<sub>2</sub>max) were performed at the same day. The 12 minute Cooper test was performed to estimate VO<sub>2</sub>max (41.73±6.92 ml/kg.min). After 3-7 days the subjects applied counter movement jump (CMJ) and squat jump (SJ) for the following parameters: (1) the maximum jumping height [SJh and CMJh], (2) the total work produced by the body in each jumping condition [SJw and CMJw: weight (kg) x jump height (m)] and (3) the anaerobic performance [CMJ<sub>power</sub> and SJ<sub>power</sub> (kg.m/s): P= √4.9 x weight (kg) x √jump height (m)]. After giving sufficient recovery time the classical Wingate anaerobic test was applied. The correlation between Wingate anaerobic test variables (APP, RPP, AMP, RMP, and FI), jump performance variables (SJh, CMJh, SJw, CMJw, SJpower and CMJpower) and VO<sub>2</sub>max was evaluated using the Pearson Product Moment Correlation analysis. Statistical significance was set at p < 0.05.

**Results**: The jump performance variables (height, total work and anaerobic power) and VO<sub>2</sub>max did not relate significantly to the fatigue index (p>0.05). Furthermore, the VO<sub>2</sub>max did not have a significant relationship with load (kg), peak power and mean power expressed in watt (w: absolute values) (p>0.05), but it had a significant relationship with peak power and mean power expressed in watt/weight (w/kg: relative values) (p<0.05). In addition, all jump performance variables (height, total work and anaerobic power) had a significant relationship with load (kg), peak power and mean power (p<0.05 and p<0.01). Although both the absolute and relative WAnT variables (w and w/kg) were significantly correlated with SJw, CMJw, SJpower and CMJpower performance variables the r values for the relative variables were lower than their absolute counterparts.

Conclusion: One of the purposes of athletic assessment is to point out specific weaknesses in performance using various splits. It is known that the SJ and CMJ are typically used as indicators of lower body power and the results indicated that vertical jump may predict the maximal anaerobic power and could be used by coaches as a practical and easy-to-apply field screening test. However, it has been suggested that when the subjects' body weight was incorporated, this led to a more representative indicator of the subjects jumping abilities. It means that, with same jumping height a

heavier subject will need greater extension strength to overcome the higher external resistance during jumping.

Keywords: Track and Field Athletes, Anaerobic Power, Anaerobic Capacity, Squat Jump, Counter Movement Jump

# PP. 80 IS THERE A DIFFERENCE BETWEEN SOME STRENGTH PARAMETERS IN 15 - 16 YEARS OLD BOYS?

Sevda Yurt<sup>1</sup>, Ozgur Nalbant <sup>1</sup>

### Abstract

Aim: The aim of the research is to determine whether there is a difference between some strength parameters in 15-16 years old boys considering the ages.

Method: 156 male 9th Grade students, whose ages are between 15 and 16 (15-year-old n: 80 [%51,3], 16-year-old n: 76 [%48,7]) studying at Sultanbeyli Industrial Vocational High School in Istanbul, has joined this research voluntarily. It is found that the 15-year-old participants' average height is  $159,59\pm7,7$ , average weight is  $54,35\pm4,2$ , and body-mass index is  $21,47\pm2,5$ ; 16-year-old participants' average height is  $159,71\pm7,8$ , average weight is  $53,01\pm3,6$ , and body-mass index is  $20,93\pm2,5$ . It is determined that between groups there is not a statistically significant difference when the values between two groups were examined (p > 0.05). Right-left grip strength, back strength, 20 m sprint, sit-ups, push-ups and standing long jump tests were applied to participants. 10 minutes warm-up was provided to the participants before starting tests. The collected data was analyzed in SPSS 14 statistic program and Independent-sample t-test was done to determine the difference between two groups with descriptive statistics.

Results: According to the statistical assessment, 15-year-old participants is measured as right grip strength, 22.08±5.9; left grip strength, 15.03±4.3; back strength, 69.05±2.3; 20 m sprint 3.23±0.1; situps, 12.46±2.1; push-ups, 19.55±3.3 and standing long jump, 124.12±10.2. 16-year-old participants is measured as right grip strength, 21.58±5.5; left grip strength, 15.31±4.4; back strength, 69.98±1.7; 20 m sprint, 3.22±0.1; sit-ups, 12.24±1.4; push-ups, 18.96±3.6 and standing long jump 125.99±9.8.

Conclusion: As a conclusion, it is determined that among all these tests (right-left grip strength, back strength, 20 m sprint, sit-ups, push-ups and standing long jump tests), there is only one significant difference between two groups in terms of sit-ups (p<0.05). The reason of the significant difference in terms of sit-up test is that there is not much difference between the participants' ages.

Keywords: Child, Strength, Puberty

# PP. 91 THE EFFECT TO BALL SPEED OF MUSCLE ACTIVATION DURING BASIC STROKES OF TENNIS PLAYERS

Seydi Ahmet Ağaoğlu <sup>2</sup>, <u>Ercüment Erdoğan</u> <sup>1</sup>

### **Abstract**

**Aim:** The purpose of this study is to detect muscle activation with the help of EMG during basic strokes of tennis players (forehand, backhand, serve). It is aimed to investigate the effect of the ball speed of the muscle activation values, by determining ball speed during the each stroke.

**Material and Method:** This study has been done on 25 recreational tennis player and tennis coach. The research has been measured in muscles of the dominant arm region; "Biceps brachii, Triceps

<sup>&</sup>lt;sup>1</sup> Gedik University Faculty of Sport Sciences

<sup>&</sup>lt;sup>1</sup> Ordu University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Ondokuz Mayıs University Yaşar Doğu Faculty of Sport Sciences

brachii, Pectoralis Major ve Deltoid at forehand stroke Biceps brachii, Deltoid, Pectoralis Major, Latissumus dorsi at backhand stroke External obligue, Erector spinea, Trapezius ve Deltoid for serve stroke. It is utilized Friedman test and the Wilcoxon test in evaluation of the data and calculated Correlation and Pearson's correlation coefficient.

**Results:** According to the results of the study; It is found to be significant difference between the muscle activation values during forehand, backhand and serve strokes. Biceps brachii and deltoid at forehand stroke technique, Deltoid, Trapezius, Erector spinea at backhand stroke technique and Triceps brachii and Deltoid at serve stroke are muscles with the highest activation and workload values. Considering the relationship between muscle activation and ball speed values,a weak relationship with the same direction in forehand and serve stroke, medium relationship with the same direction in backhand stroke are found.

**Conclusion:** As a result; it has also increased ball speed with increasing the muscle activation value at the three strokes technique in tennis. It could contribute to improve the performance of tennis strokes with participation in the movement of the more muscle group and increasing of activation values of the muscles.

Keywords: Electromyography, Muscle Contraction, Tennis Players

# PP. 103 PHYSICAL, ANTHROPOMETRIC AND MOTORIC CHARACTERISTICS EXAMINATIONS OF 14 – 16 AGE MALE VOLLEYBALL PLAYERS

Ahmet Rahmi Günay<sup>1</sup>, Kadir Gökdemir<sup>2</sup>, Erkan Günay<sup>3</sup>, Mehmet Dallı<sup>1</sup>

### **Abstract**

In our study, by examining the anthropometric and motoric characteristics of the young male volleyball players determining the sportman profile and comparing them with other parameters was aimed. Totally 50 healthy male volunteers 25 of whose average age is 15,16±0.75 years and 25 sedantaries whose average age is 15,20±0.70 years attended to the study. 30 m sprint test, 30 s. sit-up and push-up test, vertical jump test and Cooper 12m. test was applied for the detection of motor skills. Computer statistical software packet programme was used for the statistical analyses.

During the comparisons carried out fort he volunteers' physical characteristics, significant discrapancies were foun at a level p<0,01 in height, arm length, stroke length, büst, lower extremity length parameters and at a level p<0,05 in body weight parameter. No significant discrepancy was seen at body mass index. During the intergroup comparisons fort he volunteers' anthropometric characteristics, a significant difference, at a level of p<0,01, in scapular, chest,biceps,quadriceps,and calf circumference parameters was observed while a significant difference, at a level p<0,05, in waist circumference was determined. No significant discrepancy was seen in head and hip circumference parameters.

During the intergroup comparisons fort he volunteers' motoric characteristics, a meaningful difference, at a level of P<0,01, was found in 30 m Sprint, 30 sec. Sit-up, 30 sec. Push-up, vertical jump and Cooper (12 min. Running) test parameters.

As a result, when the measurements of rhe volleyball players and the control group wera compared, it was seen that arm, stroke, büst and lower extremity lengths of the volleyball players are longer and their biomotor capacities are better. In order to found a successful volleyball team in young male catagory, it is thought that all the physical, anthropometric and motoric characteristics should be at a high level and besides, our findings could be used as an average value in the selection of the young male players for a team.

Keywords: Volleyball, Anthropometric Property, Motoric Abilty

<sup>&</sup>lt;sup>1</sup> Muğla Sıtkı Koçman University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Gazi University School of Physical Education and Sports

<sup>&</sup>lt;sup>3</sup> Dokuz Eylül University School of Sport Sciences and Technology

# PP. 105 ACUTE EFFECTS OF STRENGTH PRACTICES IN DIFFERENT DENSITIES ON HAND EYE COORDINATION

K.Alparslan Erman<sup>1</sup>, Asuman Şahan <sup>1</sup>, Cenk Öztürker <sup>1</sup>

#### Abstract

Objective; The aim of this study was to investigate the effect of acute maximal, %80 and %60 intensity push up loading on targeting test.

Twenty tree undergraduate subjects (21.10±1,62 years old) voluntarily participated in the study. Subjects were informed about research design and tests before starting the application.

Method; Tests were performed three times by one week intervals. First week maximal push up performance of subjects was determined and the first application was applied. Second week %80 and third week %60 intensity push up performance were conducted. Before and after all push up loading (maximal, %80 and %60) targeting test were carried out. In other words, different intensity push up interferences was applied between targeting tests to determine acute effect of push up loading on hand eye coordination.

Results; According to results, in male significant difference was found between pre (maximal= $20.56\pm2.75$ ,  $\%60=22.50\pm2.50$ ) and post (maximal= $16.94\pm2.83$ ,  $\%60=21.56\pm2.73$ ) targeting performance on maximal and %60 intensity pus up interference ( $P_{max}=0.00$ ,  $P_{\%60}=0.00$ ). On the other hand, significant difference was not found between pre ( $21.19\pm2.56$ ) and post ( $19.19\pm2.53$ ) tests on push up interference in %80 intensity (P=0.24). In female, significant difference was found between pre ( $18.29\pm2.05$ ) and post ( $14.29\pm1.79$ ) tests merely maximal push up interference loading (P=0.00). Notwithstanding, significant difference was not found between pre ( $\%80=20.29\pm3.45$ ,  $\%60=17.86\pm2.03$ ) and post ( $\%80=18.43\pm3.40$ ,  $\%60=18.14\pm2.47$ ) targeting performance on %80 and %60 intensity pus up interference ( $P_{\%80}=0.08$ ,  $P_{\%60}=0.78$ ).

Conclusion; maximal intensity push up interference may have perturbed to hand eye coordination performance. It could be said that just maximal push up loading was perturbed hand eye coordination significantly. But there were conflicting and confusing results in %80 and %60 intensity push up interferences on hand eye coordination.

Keywords: Strength, Hand Eye Coordination, Interference, Perturbation

# PP. 111 THE EFFECTS OF 6 WEEKS LAND AND RESISTANCE TRAINING ON LOWER LIMB ISOKINETIC STRENGTH PERFORMANCE AND SWIMMING PERFORMANCE OF 13-16 YEAR OLD SWIMMERS

 $\underline{\mathsf{Barı}} \, \underline{\mathsf{Maden}}^1$ , Ayşegül Yapıcı  $^1$ , Gülin Fındıkoğlu  $^2$ , Muzaffer Doğgün  $^3$ 

### Abstract

**Objective:** The aim of this study is to investigate the effect of a 6-week land and resistance training of 13-16 year old swimmers groups to lower limb isokinetic strength values and to swimming performance. **Methods:** 14 men between the ages of 13-16, 8 women (age:  $14.13 \pm 0.88$  years, height:  $166.13 \pm 11:58$  cm, weight:  $55.68 \pm 11:52$  kg) and in total, 22 swimmers from Denizli Pamukkale University Swimming Sports Club Performance team A participated in this study. 50m swimming subjects were first ranked from best to worst grade according to their degrees and was divided at random into three groups, each of which included good, moderate, and poor ones. The first group

<sup>&</sup>lt;sup>1</sup> Akdeniz University School of Physical Education and Sports

<sup>&</sup>lt;sup>1</sup> Pamukkale University School of Sport Sciences and Technology

<sup>&</sup>lt;sup>2</sup> Pamukkale University Faculty of Medicine

<sup>&</sup>lt;sup>3</sup> Girne Amerikan University Sports High School

(group A, n = 8) did only swimming training, the second group did swimming and land training (group B, n = 7), the third group did swimming, land and resistance training (group C, n = 7). The subjects had a 6-week training program. 25m underwater, 25m, 50m, 75m and 100m freestyle swimming degrees of swimmers were recorded. Before starting training, and after training, their isokinetic strength testing measurements were taken with an isokinetic dynamometer. As isokinetic measurements, 5 repetitions at 60 °/s, 180 °/s speed and 15 repetitions at 240 °/s speed, flexion and extension of the concentric isokinetic strength test was applied to the right and left knee eliminating the effects of gravity. For the statistical analysis, Kruskal-Wallis is used to look at the differences between groups and the Mann-Whitney U test is used for analyzing by which group the difference is caused. Group pre-test-post-test differences were analyzed with the Wilcoxon test. Results: Statistically significant difference was found between pre-test and post-test of 25m underwater, 25m freestyle, 50m freestyle, 75m freestyle and 100m freestyle swimming values (p <0.05). In all groups, at 60 °/s, 180 °/s, 240 °/s, for the right and left knee flexors and peak torque of ektensör, numerically positive development is observed. 25m underwater, 25m, 50m, 75m and 100m freestyle swimming, very positive development in terms of performance was observed. At the end of six weeks of training, isokinetic strength and swimming degrees of the group C increased 9.25%, whereas these values in athletes in group B has increased 8.35%. Looking at the statistical analysis of the pre-test and post-test results in 25m underwater, 25m, 50m, 75m and 100m freestyle swimming values were statistically significant between the groups (p <0.05). After 6-week the land and resistance training, leg strength performance and the degrees of swimmers increased. The resistance training has been found to be more effective in this performance improvement. **Conclusion:** This study shows that the knee flexors and ektensors peak torque showed a significant increase after 6 weeks of training together with 60 °/s, 180 °/s and 240 °/s speed; especially in this age group swimmers, it is possible to say that the land and resistance training can make a significant contribution to the performance of the force. In addition, that athletes adapt to this speed of isokinetic testing could have positive effects on the performance increase. The resistance training (9.25%) leg strength was found to be more effective in degrees of performance and swimming performance, when compared with land training (8.35%).

Keywords: Swimming, Land And Resistance Training, İsokinetic Strength, Swimming Degree

### PP. 112 THE TECHNICAL ANALYSIS OF GOALS SCORED IN THE 2010 WORLD CUP

Özcan Güler <sup>1</sup>, Ayşegül Yapıcı <sup>1</sup>, <u>Barış Maden</u> <sup>1</sup>, Muzaffer Doğgün <sup>2</sup>

### Abstract

**Objective:** The purpose of this study is to determine what technical and tactical characteristics in preparing goals in the 2010 World Cup matches is in the forefront and according to these factors, to develop targets for effective training plans. Methods: Video recording system and method ruler in hand with watching the match criteria are analyzed with the notation system. **Results:** 32 teams had 64 matches in the 2010 World Cup and hit 145 goals, which makes 2.27 goals per match. 89.06% of matches had goals and the 10.94% did not have any goal. The highest ratio per game is 3.0 goals in the semi-finals and finals. Goals scored in the game happened in 2.6 sec with fixed balls and this figure was 6.9 sec. at the time of the formation of the game. Number of goals made before the pass was found to be 3.8 per goal. While the goals inside the penalty area were by 82.06% and 17.93% were found to be outside the penalty area. The 59.31% of goals happened with right foot. Respectively, 17.93% were head goals. Fixed ball goals scored constitued 18.14% of the total goals scored while 81.86% of the goals were done in the set of the game. Conclusion: It has been found that the number of goals per game in the 2010 World Cup was slightly lower than the previous championships. The decrease in the number of goals scored in the game was due to a game based on defense and in addition to prominence of the top features, which may have both positive and negative effects. Football coaches should follow the course of the current changes in the technical and tactical plans and

<sup>&</sup>lt;sup>1</sup> Pamukkale University School of Sport Sciences and Technology

<sup>&</sup>lt;sup>2</sup> Girne Amerikan University Sports Highschool

do necessary changes and they should precede with this change to be followed by coaches of their country.

Keywords: Football, Goal, Goal Pass, The Time To Reach The Goal

### PP. 140 THE EFFECTS OF FATIGUE ON INSTEP KICK PERFORMANCE IN SOCCER

Bekir Mehtap<sup>1</sup>, Sükrü Serdar Balcı <sup>1</sup>

<sup>1</sup> Selçuk University School of Physical Education and Sports

### **Abstract**

**Aim:** In this study, the effects of fatigue on the performance of instep kick which is often used tecnique in soccer was examined.

**Method**: Seven male amateur soccer players voluntereed to participate in this study. Each had a minimum 6 years of soccer playing experience. The age of subjects was (mean $\pm$ SD) 22,85  $\pm$  1,57 years, their height was 178,14  $\pm$  3,08 cm, their weight was 69,35  $\pm$  3,71 kg, their body mass index was 21,86  $\pm$  1,25 kg/m<sup>2</sup>, and their maxVO<sub>2</sub> values were 59,14  $\pm$  4,77 ml/kg/min. The high intensity endurance protocol selected to be used in the present study has been previously applied to simulate soccer field conditions to occur fatigue on subjects. Test application was conducted in the form of repeated shuttle run on 20 m running course and held outdoors. The duration of test was minutes and consist of 9600 m. During the test, participants were completed in foru stages consisting of 12 x 200 m.

Each completed a 200 meter distances include 60 m walking, 15 m sprint, 60 m jogging and 60 m running acvities. Jogging pace and shuttle runs was calculated according to the values obtained from the  $maxVo_2$  values of subjects. Subjectswere tried instep kick performance examined in the study total of 3 times, at the beginning of part 1 and at the end of part 2 and 4. Instep kicks were apllied to the standart soccer goal from a distance of 16 m accordance with soccer-specific dead ball test criteria. Test scores were applied to the correct target in instep kicks. The statistical analysis of the datas obtained a single-factor variance analysis in repeated masures and Bonferonni's multiple comparison test by SPSS 15.0 analysis programme.

**Findings:** It was observed that the sprint times were generally increased while the test sections compared statictically significant differences emerged (P<0.01 and these differences was determined between the first part and the last part (P<0.05). During the exercise in the mean heart rate values, significant difference was observed in the test parts (P<0.01) and It was between the first -third part and second-fourt part (P<0.05). Lactate levels observed in subjects generally incrased. Significant difference was occured between before the test with the middle and end of the test in lactate levels(P<0.01). Analyzing the instep kicks applied in accordance with soccer-specific dead ball test, significant reduction occured in the middle and the end of test compared with the beginning of the test (P<0.01).

**Result**: The instep kick is an important technique widely used in soccer. Data obtained that the fatique affects the soccer instep kick performance negatively.

Keywords: Soccer, fatique, instep kick

# PP. 141 PHYSIOLOGICAL RESPONSES TO DIFFERENT TYPES IMPLEMENTED OF ENDURANCE TRAINING IN YOUNG MALE BASKETBALL PLAYERS

Wisam Zuhair Abduljabbar Al Abdılh<sup>1</sup>, Seyfi Savaş <sup>1</sup>

### **Abstract**

This study was planned to determine whether a set of different types of endurance exercises, carried out regularly for a period of eight weeks by three sets of male basketball players of same age and anthropometric structural qualities, have effects on certain physiological characteristics. 48 healthy, male athletes with an average age of  $16.4 \pm 0.4$  from the Ankara Büyük Kolej High School have voluntarily participated in the study. Study groups consisted of 16 athletes to form interval exercise group(1), 16 athletes to form continuous run group(2) and 16 athletes to form technical exercise group(3) which is the control group. Following anthropometric physiology tests were carried out on the three groups before the 8 weeks exercise period and three days after the end of this period. All tests were conducted at Ankara provincial centre. Anthropometric and physiological measurements included height and body weight, body mass index, body fat percentage, resting heartbeat count, vertical jump and anaerobic power, Max.VO2 (with 20m back and forth running exercise). Results of the study indicates that the measurement parameters used to test the efficiency level of the endurance exercises i.e. the body fat percentage, Max.VO2 and resting heartbeat count, exhibits statistically significant differences in all three groups. (< 0.001 and < 0.005)

Keywords: Aerobic Training, Endurance Training, Young Male Basketball Players

# PP. 142 COMPARISON OF THE EFFICIENCY RATINGS OF THE TURKISH WOMEN BASKETBALL 2ND LEAGUE TEAMS

### Barıs Gürol<sup>1</sup>

### Abstract

**Purpose**: The aim of this study is to compare performance of the Turkish Women Basketball 2nd League (TKB2L) teams for three different seasons.

**Method**:Totally 76 teams of 3 different seasons was calculated. The statistical datas of the teams was obtained from Turkish Basketball Federation's (TBF) statistical web page (www.tbl.org.tr). John Hollingers' efficiency score calculation was used. Efficiency rate = (Point x 1.0) + (Total successful shot x 0.4) + (Total shot x -0.7) + ((Free throw – Successful free throw) x -0.4)) + (Offensive rebound x 0.7) + (Defensive rebound x 0.3) + (Steal x 1.0) + (Assist x 0.7) + (Block x 0.7) + (Foul x -0.4) + (Turnover x -1.0) One Way Anova test was used to analyze the differences between the teams efficiency ratings.

**Findings**:It has been reported that the average points of the teams' free throws and assists have gradually increased. For average points; 2011-2012 season: 63.25±11.05, 2012-2013 season: 64.66±14.14, 2013-2014 season: 64.90±12.87, For average free throws; 2011-2012 season: 17.60±2.79, 2012-2013 season: 17.80±2.86, 2013-2014 season: 18.29±3.33, For average assists; 2011-2012 season: 12.74±3.01, 2012-2013 season: 13.70±4.80, 2013-2014 season: 14.23±4.26. The explanation of this situation is that the teams have higher quality of players and the teams are trained with coordinated offensive tactics. The increased number of the shots in the last season that describes the total initiative of shots support this situation. This condition enhances the idea of a good offense starts with a good defense. There is no statistically meaningful difference in the average efficiency of TKB2L teams' traditional and play-off seasons.

**Results**: There is no statistically meaningful difference in the efficiency ratings of TKB2L among the seasons of 2011-2012, 2012-2013 and 2013-2014. Calculating the efficiency ratings of different leagues and age groups will give us positive results in terms of performance evaluation. Individual and

<sup>&</sup>lt;sup>1</sup> Gazi University Institute of Health Sciences School of Physical Education and Sports

<sup>&</sup>lt;sup>1</sup> Anadolu University Faculty of Sport Sciences

team performance evaluations can be done by calculating efficiency points. Efficiency ratings have such contributions to the stakeholders: To the federation: Calculating and comparing the efficiency ratings of the different seasons may help the coordinators of the leagues to determine the statues of the leagues. To the manager: Helps to make a comparison according to the efficiency ratings of the team and the individuals.

To the trainer: The trainers can get information by calculating the efficiency ratings of the team or individuals in different seasons.

Keywords: Basketball, Efficiency Rate, Performance

# PP. 143 HOW DOES THE GROUND REACTION FORCE AFFECT THE 6S SPRINT PERFORMANCE?

<u>İzzet Kırkaya</u><sup>1</sup>, Barış Gürol <sup>1</sup>, İlker Yılmaz <sup>1</sup>

<sup>1</sup> Anadolu University Faculty of Sport Sciences

### **Abstract**

**Purpose:** In our study, during their 6s. sprint performances with three dimensional movement analysis the force which rises by being increased ground reaction force as the participants' body weight's %10 and %15 and their own body weight have been analyzed and it is aimed at being seen the effect of the increasing ground reaction force.

**Method:**8 female sportswomen of Anadolu University Youth and Sport Club that competes in the second league of Turkey Women's Basketball participated in this study. 6s. sprint kinematical analysis of the participants was made with two fast filming cameras that are able to record up to 500 Hz and a software program that is able to record the scenes simultaneously into computer in 60 Hz. The sprints were applied in such a way that ground reaction forces increase body weights in %0, %10 and %15 load on unmotorised treadmills during 6s., it was recorded with avi. format and the scenes which are in equal length and simultaneous were analyzed. The difference among three different measurements (%0, %10, %15 ground reaction force) that belongs to one group was tested with One Way Anova after homogeneity of variances and significance level was taken as p<0.05.

**Findings:** In the 6s. sprint tests that were done with %0, %10, %15 ground reaction force, a statistically, on highest degree meaningful result was found among the distance that was passed, average velocity, average horizontal force, the top velocity and the top horizontal force ( $p \le 0.01$ ). A statistically meaningful relationship was not found between average vertical force and vertical force on the top velocity (p > 0.05).

In the 6s. sprint tests which was done with %0, %10, %15 GRF of knee and elbow joints, statistically meaningful relation was not able to be found among angle, angular velocity, vertical velocity, horizontal velocity and resultant velocity (p>0.05).

**Results:** During the 6s. sprints that were done with %0, %10, %15 of the participants' body weights, it has been seen that vertical ground reaction force did not increase. This also shows that the participants could apply more force to the ground to accelerate and accordingly they carried out the sprint performance in a longer time. Not to be found a meaningful relationship among angle, angular velocity, horizontal velocity, vertical velocity and resultant velocity arises from reacting to ground reaction force in the same way with the sprint that is done with body weight. The participants could not increase their velocity in the face of increasing ground reaction force and therefore realized the 6s. sprint performance in a longer time.

Keywords: Ground Reaction Force, Motion Analysis, Sprint Biomechanics

# PP. 161 REVIEW OF THE STUDENTS' ANTHROPOMETRIC AND SOMATOTYPE STRUCTURES

Onur Bozlar<sup>1</sup>, Vedat Ayan <sup>2</sup>

### **Abstract**

**OBJECTS**: The aim of this study is to ascertain anthropometric and somatotype differences of male students who are being educated in the first class of Department of Physical Education and Sport Teacher (DPEST), the Department of Executive Training(DET) and the Department of Coaching Education(DCE) at Karadeniz Technical University, school of Pyhsical Education and Sports.

**METHODS:** Totally 64 volunteer male students who participated; they were 27 students from DPEST, 20 students from DET, 17 students from DCE to this investigation. The somatotypes of the students were determined in accordance with the tecniques prescribed by the 'International Society fort he Advancement of Kinanthropometry (ISAK); 11 antropometric measurements as body weight, body height, knee and elbow circumference(width), biceps and calf girth, triceps, biceps, subscapular, suprailiac and calf skinfold thickness were measured. The Heath-Carter method was used for the determination of the somatotype characteristics. The statistical analysis of the measurements was calculated at spss 15.0 package programme with 95% confidence interval for mean(p<0.05). Anova was used to determine the differences between departments and the differences amongst the departments and measurements was determined with the Schhefee test.

**FINDINGS:** It was determined that the average age was 20,52±0,55 years, the average body weight was 71,028±1,84 kg and the average body weight was 174,38±,39 cm for the students. In this study, the average somatotype values for DPEST students were 3,5-4,1-2,4, DET students were 3,4-4,3-2,1 and DCE students were 3,5-4,1-2,4.

**RESULT:** As a result, statistically there were no significiant difference between endomorph, mesomorph and ectomorph value for the DPEST, DET and DCE students participated in this study.

Keywords: Anthropometry, Somatotype, student, School of Physical Education and Sports

# PP. 163 THE STUDY OF THE SOMATOTYPE STRUCTURES AND THE PERFORMANCE CHARACTERISTICS OF TURKEY'S U15 MEN'S NATIONAL BASKETBALL TEAM PLAYERS

<u>Vedat Ayan</u><sup>1</sup>, Emre Erol <sup>2</sup>

### Abstract

**OBJECTS**: In the study it is aimed to assess the somatotypes and performance characteristics of The Turkey's U15 Men's National Basketball Team Players.

**METHODS**: 19 Turkish U15 National Male Basketballers (mean age 15±1 years old, mean height 191,63±8,14 cm tall, mean body weight 83,52±11,41 kg) participated in the study as volunteers. In our study 11 anthropometric measurements such as, skinfold thickness, circumference and width measurements were taken. Heath-Carter method was used to determine the somatotype characteristics of the basketball players. Of performance characteristics, standing long jump test, vertical jump test, 20 m. speed run test were applied. To determine the somatotypes of the players Heath-Carter method was used. The mean values and the standart deviations of the measurements taken were calculated. Correlation was made to determine whether there was a relationship between the somatotypes and the performances of the players. The statistical analyses of the measurements were

<sup>&</sup>lt;sup>1</sup> Yüzüncü Yıl University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Karadeniz Technical University School of Physical Education and Sports

<sup>&</sup>lt;sup>1</sup> Karadeniz Technical University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Gazi University School of Physical Education and Sports

calculated by using SPSS 13.0.

**FINDINGS:** Of the performance measurements of The Turkey's U15 Men's National Basketball Team Players, the mean vertical jump value was 49,05±6,55 cm, the mean standing long jump value was 210,63±15,04 cm and the mean 20 m speed run test value was 3,32±,19 sec. The mean somatotype values of the players that participated were found as 3,0-4,1-3,6

**RESULT:** As a result, we think that the data obtained through this study will be beneficial to the selection of basketball players and to the preparation of the training programmes and plans for certain player positions as well as determining the somatotypes and performance characteristics of The Turkey's U19 Men's National Basketball Team Players.

Keywords: Male, Basketball, Anthropometry, Somatotype, Performance Tests

# PP. 167 ANALYZING THE 8-14 AGED MALE SWIMMERS' SOMATOTYPE STRUCTURES AND HORIZONTAL SKIPPING FEATURES

Nehir Kavi <sup>1</sup>, Gamze Beyazoğlu <sup>2</sup>, <u>Vedat Ayan</u><sup>2</sup>

### Abstract

**OBJECTIVE:** The object of this study is 8-14 Analyzing the 8-14 aged male swimmers' somatotype structures and horizontal skipping features.

**METHOD:** To this study, in Trabzon province, 85 male swimmer who is interested in swimming and whose average of age is 11±1 years, average of height is 140,63±12,43 cm, average of weight is 38,15±11,85 kg. In this study, 11 anthropometric measurements were taken including thickness of skin fold, surrounding measurement and width measurement. Heath-Carter method was used to determine athletes' somatotype features. From performance features, standing long jump test was applied. Descriptive statistics of all received data were examined. During data analysis SPSS 17.0 software was used.

**FINDINGS:** Horizontal skipping averages of participating male swimmers determined as 1,12±0,28 m and somatotype average value as 3,3-4,3-2,7. In our study, it is found that male swimmers' average somatotype structures are endomorphic mesomorph.

**RESULT:** As a result, it is thought that acquired data along with determining male swimmers' somatotype structures may be beneficial for choosing swimmers and making training programs and schedules.

\*NOTE: Kavi, N is produced from the postgraduate thesis of.

Keywords: Anthropometry, Somatotype, Swimming, Horizontal Skipping, Male

# PP. 179 THE EFFECTS OF RHYTHMIC GYMNASTICS TRAINING ON BLOOD NITRIC OXIDE LEVELS

Faruk Turgay  $^1, \underline{\mathsf{Pinar}}\, \underline{\mathsf{Tatlibal}}^2$ , Onur Oral  $^1$ , Ali Rıza Şişman  $^3$ 

### Abstract

Aim: Nitric oxide (NO) is a gas which has vasodilatory, antioxidant and various metabolic regulatory features. It is known that doing aerobic exercise regularly has healing effects on blood NO levels. However, basically the effects of an anaerobic type of training are unclear especially on children. Thus,

<sup>&</sup>lt;sup>1</sup> Ardahan University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Karadeniz Technical University School of Physical Education and Sports

<sup>&</sup>lt;sup>1</sup> Ege University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Dokuz Eylül University School of Sport Sciences and Technology

<sup>&</sup>lt;sup>3</sup> Dokuz Eylül University Faculty of Medicine Department of Medical Biochemical

the aim of this study is to investigate the effects of rhythmic gymnastics trainings on blood nitric oxide levels and muscle injury markers. Methods: 8-14 aged ( $10.33 \pm 1.79$  years) unmenarched, healthy and trained 16 rhythmic gymnastics athletes (RGG) and 13 sedentary (CG) girls (age;  $9.23 \pm 1$  years) participated in this study. The physical measurements were performed for the volunteers. After 12 hours of fasting, venous blood samples were taken at 09:00 - 10:00 am. Fasting blood NO levels were measured. The measurements of alanine amino transferase (ALT), aspartate amino transferase (AST), gamma-glutamyl transferase (GGT), lactate dehydrogenase (LDH), creatine kinase (CK) as muscle injury indicators and creatine kinase-MB (CK-MB) enzyme activities, troponin-I (Tn-I) and myoglobin (MYB) levels as heart muscle injury markers were determined. Results: The body fat ratio values of RGG found significantly low in comparison with CG. There is no significant difference between RGG (107.94 $\pm$ 6.41 µM) and CG (107.01 $\pm$ 17.73 µM) in terms of NO levels (p =0.102). There is no significant difference between RGG and CG in terms of muscle damage parameters. All the biochemical parameters were found between normal value ranges. Conclusions: The results of this study indicates that rhythmic gymnastics training has no effect on children in terms of NO levels and evaluated muscle damage parameters. However it is thought that more narrowly defined age groups and more participants are needed to determine the effects of rhythmic gymnastics training on children.

Keywords: Nitric Oxide, Muscle İnjury, Rhythmic Gymnastics

# PP. 181 IS THERE A RELATIONSHIP BETWEEN ISOKINETIC SHOULDER STRENGTH AND PROPRIOCEPTION OF OVERHEAD ATHLETES?

Özgür Koçak<sup>1</sup>, Barış Gürol<sup>2</sup>, Erkan Akdoğan<sup>2</sup>

### **Abstract**

**Purpose** The aim of the study is to find whether there is a relationship between shoulder proprioception and strength in elite overhead athletes including tennis, handball and volleyball branches

**Method** Isokinetic 60°.sec<sup>-1</sup> and 180°.sec<sup>-1</sup> shoulder abduction strength and internal shoulder proprioception of 15° have been tested. Totally 20 male (tennis n=7, handball n=7, volleyball n=6) voluntarily participated in the study. The difference between the isokinetics and proprioception was tested with One Way Anova after homogeneity of variances and significance level was taken as p<0.05 and the relationships were tested with Pearson Correlation.

**Findings** The average proprioception test results of the athletes was; handball players=13.10±3.16, tennis players= 12.81±2.21 and volleyball players=10.72±2.30 respectively.

The isokinetics shoulder abduction strength of the tennis players was  $ext60^{\circ}.sn^{-1}=46.00\pm7.62$ ,  $flex60^{\circ}.sn^{-1}=34.71\pm4.72$ ,  $ext180^{\circ}.sn^{-1}=38.57\pm7.61$ ,  $flex180^{\circ}.sn^{-1}=31.43\pm4.31$  respectively.

The isokinetics shoulder abduction strength of the handball players was  $ext60^{\circ}.sn^{-1}=50.43\pm10.60$ ,  $flex60^{\circ}.sn^{-1}=39.29\pm2.98$ ,  $ext180^{\circ}.sn^{-1}=40.00\pm3.87$ ,  $flex180^{\circ}.sn^{-1}=34.43\pm2.23$  respectively.

The isokinetics shoulder abduction strength of the volleyball players was  $ext60^{\circ}.sn^{-1}=50.83\pm5.42$ ,  $flex60^{\circ}.sn^{-1}=36.17\pm4.75$ ,  $ext180^{\circ}.sn^{-1}=44.67\pm5.47$ ,  $flex180^{\circ}.sn^{-1}=70.00\pm11.47$  respectively.

**Results** No statistically difference has been found in 60°.sec<sup>-1</sup> and 180°.sec<sup>-1</sup> shoulder abduction strength of the groups. There is not a statistically meaningful difference in shoulder proprioception, either statistically negative correlation has been detected between 60°.sec<sup>-1</sup> and 180°.sec<sup>-1</sup> shoulder extention strength and shoulder proprioception. The higher peak isokinetic strength values of the athletes has the lower proprioception.

### Keywords: Shoulder Isokinetic Strength, Proprioception, Kinesthesia

<sup>&</sup>lt;sup>1</sup> Eskişehir Osmangazi University Rectorate Department of Foreign Languages

<sup>&</sup>lt;sup>2</sup> Anadolu University Faculty of Sport Sciences

# PP. 182 COMPARISON OF ANTHROPOMETRIC AND SOMATOTYPE CHARACTEROISTICS OF AMATEUR AND PROFESSIONAL SOCCER GOALKEEPERS IN TRABZON

Yalçın İnan <sup>1</sup>, <u>Selami Yüksek</u><sup>2</sup>, Vedat Ayan <sup>2</sup>

### **Abstract**

**OBJECTS**: The purpose of this study is to compare the anthropometric and somatotype characteristics of goalkeepers playing for professional and amateur soccer teams in Trabzon.

**METHODS**: Sixty volunteer goalkeepers, including 30 professional and 30 amateur players from professional and amateur teams in the city of Trabzon, participated in this study. To determine the somatotypes of the participants, their height, weight, and skinfold depths, including environmental and width measurements, were taken as anthropometric measurements. The Heath-Carter method was used in determining the somatotype characteristics. A statistical analysis of the measurements was performed using the SPSS 17.0 program. Descriptive statistics were determined. The frequency values of the data were also considered. Data were measured as frequencies. To make comparisons between professional and amateur goalkeepers, an Independent-samples t-test was applied.

**FINDINGS**: In our study, the mean age was determined to be 13,06±1,73 years for professional goalkeepers and 13,37±1,71 years for amateur goalkeepers: height averages were164,33±13,62 cms for professional goalkeepers and 159,37±12,39 cms for amateur goalkeepers: and average weight was 54,05±14,88 kgs for professional goalkeepers and 53,94±14,80 kg for amateur goalkeepers. In this study, the average value for anthropometric measurements was 2,1-3,9-3,6 for professional goalkeepers and 2,7-5,1-2,7 for amateur goalkeepers. The somatotype body types of professional goalkeepers were determined to be mesomorph-ectomorph mix, and the body types of amateur goalkeepers were determined to be mesomorph with a balanced body composition.

**RESULT:** At the conclusion of our study, no significant differences (p>0,05) were observed between the height and weight averages, subscapula DKK, biceps and calf circumference measurements of professional and amateur goalkeepers. However, a statistically significant difference (p<0.05) favoring amateur goalkeepers was evident in the triceps DKK, iliac DKK and calf DKK values. In their somatotype assessments, endomorph (p<0,05) and mesomorph (p<0,01) values were in favor of the amateurs, while the ectomorph values (p<0,01) favored professional goalkeepers.

**NOTE**: This paper was dervied from Inan, Y.'s master's thesis.

Keywords: Football, Soccer, Goalkeeper, Anthropometry, Somatotype

# PP. 187 EFFECT OF BALL THROW TO THE TARGET DRILL ON TENNIS PERFORMANCE TEST

Asuman Şahan<sup>1</sup>, K.Alparslan Erman<sup>1</sup>, Kıvanç Korkmaz<sup>1</sup>

### Abstract

As is known, improvement of hand-eye coordination in tennis instruction is important in terms of target performance. In addition, it is also possible to assert that tennis is a branch of sports that requires hand-eye coordination. As it can be also understood from the references, improvement of hand-eye coordination through various tools and means in the early phase of tennis instruction facilitates the acquisition of tennis skills.

In the present study, the hypothesis that hand-eye coordination exercises carried out in addition to

<sup>&</sup>lt;sup>1</sup> Ministry of National Education of Anatolian Imam and Preacher High School

<sup>&</sup>lt;sup>2</sup> Karadeniz Technical University School of Physical Education and Sports

<sup>&</sup>lt;sup>1</sup> Akdeniz University School of Physical Education and Sports

regular trainings in tennis would improve tennis test performance was tested. According to this, the purpose of the study was to examine the effect of target drill carried out in addition to regular technique trainings on tennis test performance requiring target.

A total of 30 (7 female and 23 male) students attending to School of Physical Education and Sports participated the study as volunteers. At the start of the study, the students were randomly divided into two groups. Both of the groups went through 8 weeks of tennis training, 2 days a week and 2 hours a day. In addition to the regular tennis training, the first group (T+HEC) also conducted aiming drills one day a week. The second group (T) on the other hand carried out only regular tennis trainings. At the first and eight weeks of the study, both of the groups were subjected to tennis performance tests and ball throw to the target tests. In the first 2 hours of the first week, the students got familiarized with the court. Some coordination exercises were carried out in the first course, and pre-tests were carried out on the second day of the first week.

According to the results of the study it was determined that there was an increase of  $25.22\% \pm 17.80$  between the pre-test and post-test results of the group T+HEC, and that this increase was statistically significant (P=0.00). For the group T on the other hand, it was determined that there was a significant difference of  $29.17\% \pm 17.71$  between the pre-test ( $25.37\pm11.37$ ) and post-test ( $54.54\pm17.17$ ) results (P=0.00). However, no significant difference could be found between the two groups' pre-test and post-test scores (pre-test: P=0.11, post-test: P=0.33).

In terms of ball throw to the target test, it was determined that there was a statistically significant increase of  $13.33\% \pm 7.70$  from the pre-test  $(65.42\% \pm 8.77)$  to the post-test  $(78.75\% \pm 7.50)$  results of the group T+HEC (P=0.00). For the group T on the other hand, it was determined that there was a statistically insignificant (P=0.58) improvement of  $2.23\% \pm 13.74$  from the pre-test  $(67.23\% \pm 9.63)$  and post-test  $(65.00\% \pm 10.30)$  results. While there was no difference between the two groups in terms of their pre-test results (P=0.61) it was determined that there was a significant difference in favor of the T+HEC group in post-test results (P=0.00).

In the conclusion of the study it was determined that 8 weeks of hand-eye coordination exercise carried out in line with regular tennis training does not significantly affect tennis target performance, yet that the group that carried out hand-eye coordination exercises together with tennis trainings had significantly better results from the target test.

Keywords: Tennis, Hand-Eve Coordination, Learning, Performance, Test

# PP. 195 THE COMPARISON OF HYPOALGESIA EFFECTS DUE TO EXERCISE TRAINING IN ESPECIAL GROUP

 $\underline{\text{Sadegh Abbasian}}^1$ , Seyyed Reza Attarzadeh  $^2$ , Amin Azımkhanı  $^3$ , Nima Gharahdaghı  $^1$ , Samane Abbasian  $^4$ 

### Abstract

**Objectives**: Addiction is a fundamental troublesome of humans in a current century. This illness showing itself with decrease in use of brain's reward center or pleasure center and changing in perception pain levels. The purpose of this study was to determination effect of aerobic exercise on Beta-Endorphin (BEND) levels, brain's reward center and status of hypoalgesia in addict men.

**Methods**: In this study, 20 addict men aged 20-33 years old as a public call were selected randomly and after it were divided in to drug supplement (N=10) and exercise -drug supplement (N=10) groups. Then while the first group would do only consumption 10 milligrams methadone daily, exercise -drug supplement group in addition to the intervention drug supplement group, exercise to be carried out in 20 sessions (5 sessions per week and for 45 to 55 minutes in each session). In addition, for check the

<sup>&</sup>lt;sup>1</sup> University of Tehran School of Physical Education and Sports Sciences

<sup>&</sup>lt;sup>2</sup> Ferdowsi University of Mashhad School of Physical Education and Sports Sciences

<sup>&</sup>lt;sup>3</sup> University of Imam Reza School of Physical Education and Sports Sciences

<sup>&</sup>lt;sup>4</sup> Shahroud University of Medical Sciences Medicine

desired changes after study's intervention, blood samples were taken for survey of BEND levels, hypoalgesia due to ischemic pain, mechanical pain and pain due to decrease and increase of temperature. Finally, use SPSS software for data analyze in the level of p < 0/05.

**Results**: statistic surveys after study's intervention was shown that the amounts of BEND significantly increase in both groups (P<0.05). Also, exercise-drug supplement group in all of painful stimulus capable to significantly enhanced status of hypoalgesia but drug supplement group only in hypoalgesia due to perception of mechanical pain was significantly enhanced (P<0.05).

**Conclusions**: With considering results of current study and use of the study's literature, we can deduction that presumably method of exercise-drug supplement is a better for treatment of addict men. In also, it is a good method for enhance of body's systems of addict men.

Keywords: Aerobic Exercise, Brain's Reward Center, Beta-Endorphin (Bend)

# PP. 198 ISOKINETIC HAMSTRINGS: QUADRICEPS RATIOS IN VOLLEYBALL PLAYERS

Ayşegül Yapıcı <sup>1</sup>, Muzaffer Doğgün <sup>2</sup>, Engin Güneş Atabaş<sup>3</sup>

- <sup>1</sup> Pamukkale University School of Sport Sciences and Technology
- <sup>2</sup> Girne Amerikan University School of Sports

### Abstract

Aim: The aim of this study was to analyze of hamstring to quadriceps peak torque ratio (H:Q) measured in isokinetic testing with respect to different angular velocities (60°/s, 180°/s, 300°/s), gender and dominant side in professional volleyball players. Methods: Twenty male (average age: 24.1±2.6 years; body height: 182±4.3 cm; body mass: 75±10.1 kg) and ten female athletes (average age: 20.8±1.6 years: body height: 165±7.4 cm, body mass: 56±6.3 kg) participated in this study voluntarily. All the players had a minimum 10 years of training experience. At the beginning of the study, subjects were informed about the possible risks and benefits of the study and gave their informed consent to participate in this study. The players did not participate in any other training or matches during the study. The players participated in anthropometric measurements (body height, body mass) followed by a isokinetic concentric quadriceps and hamstring muscle strength tests were performed. For each player, isokinetic concentric quadriceps and hamstring muscle strength tests were performed at 60°/s, 180°/s and 300°/s muscle test for right and left knees. An isokinetic dynamometer (Cybex Humac Norm 770, USA) was used to measure knee flexion and extension torque. **Results:** There were statistically significant difference between 60-300°/s and 180-300°/s velocities (p<0.05), whereas there was no statistically significant difference between 60-180°/s (p>0.05). There were no difference of hamstring to quadriceps peak torque ratio between female and male athletes in 3 speeds (p>0.05). There was a statistically significant difference between domiant and non-dominant side (p<0.05). It was found in our study that H:Q ratio increases with increasing speed. This implies that isokinetic concentric knee strength plays more role in high intensity contractions and has more effect at high velocities of contraction in maximal anaerobic performance. Conclusion: The findings of the present study indicated that the evaluations of isokinetic torque of knee extensors/flexors strength values important in order to inform the trainer about team's performance.

Keywords: Hamstring Quadriceps Strength Ratio, Angular Velocity, Gender, Dominant Sid

<sup>&</sup>lt;sup>3</sup> Süleyman Demirel University Institute of Health Sciences

# PP. 199 VELOCITY DIFFERENCES OF THROWING TAKEN FROM DIFFERENT POSITIONS IN WATER POLO AND THEIR CORRELATION WITH ANTHROPOMETRIC CHARACTERISTICS

 $\underline{\mathsf{Ayşegül\ Yapıcı}^1}, \mathsf{Mehmet\ Zeki\ Özkol\ }^2$ , Bahtiyar Özçaldıran $^2$ , Metin Ergün $^3$ 

### Abstract

Aim: The primary aim of this study is to determine whether there are correlations between the velocities of throwing taken from various game positions with anthropometric characteristics and the secondary aim is to find out if the throwing velocities vary by the positions. **Methods:** 18 male water polo players (mean age: 20.94 ± 5.83 years, mean body mass: 76.51±14.74 kg, mean stature: 178.86±7.42 cm, mean experience: 9.00± 6.08 years) aged 15-33 in the national Water Polo 1st League participated in the study. The design of the structure is in compliance with the "Declaration of Ethical Principles for Medical Research including Human Subjects" and was approved by the Medical Faculty Clinical Research Ethics Committee of the Ege University. Informed consent forms were obtained from each subject prior to the study. All measurements were taken during the preparation period at the beginning of the season and all tests were completed in one week. The physical characteristics of the players and anthropometric measurements (breadth, girth and skinfold) were taken and throwing velocities of overhead throw, back hand throw and sweep throw were measured from position-2, position-3, position-4 and position-6. Bushnell sports radar was used for the measurement of throwing velocities. Results: Significant positive correlation was found between throwing velocities and shoulder, chest (mesosternale), waist (minimum), forearm (maximum) girth, arm relaxed and arm flexed and tensed girth, bideltoid and chest (transvers) breadth (p<0.01; p<0.05). Repeated measures of ANOVA results showed that there were significant differences in throwing velocities between different throw forms taken from 4 different positions (p<0.001; p<0.05). In the context of throwing velocities, the main finding of this study was that there was high differences between throwing velocities taken from position-6 (back hand throw: 50.22 km/h, sweep throw: 45.94 km/h) and other positions (position-2: 65.94 km/h, position-3: 63.83 km/h, position-4: 64.78 km/h) possibly due to different types of throwing techniques. Conclusion: The distance of the throw was taken closer zones to the goal, the velocity of the throw decreases was determined. It has been verified that having ideal anthropometric characteristics (stature above the average, flexible and long limbs, a slim waist, wide shoulders, a wide chest girth) is an important factor for players in water polo to reach high performance. These throwing velocities and physical parameters will be useful for meeting the physical demand required by the water polo and will help coaches to choose players for different positions within the game.

Keywords: Water Polo, Back Hand Throw, Sweep Throw, Throwing Velocity, Anthropometry

# PP. 200 EVALUATION OF THE RELATIONSHIP BETWEEN ISOKINETIC STRENGTH AND FIELD PERFORMANCE IN PROFESSIONAL MALE VOLLEYBALL PLAYERS

<u>Ayşegül Yapıcı</u>  $^1$ , Muzaffer Doğgün  $^2$ 

### Abstract

**Aim:** The purpose of this study was to investigate the relationship between the isokinetic quadriceps and hamstring strength and, sprinting ability, agility and vertical jump performance in male volleyball

<sup>&</sup>lt;sup>1</sup> Pamukkale University School of Sport Sciences and Technology

<sup>&</sup>lt;sup>2</sup> Ege University School of Physical Education and Sports

<sup>&</sup>lt;sup>3</sup> Ege University Faculty of Medicine Sports Medicine Department

<sup>&</sup>lt;sup>1</sup> Pamukkale University School of Sport Sciences and Technology

<sup>&</sup>lt;sup>2</sup> Girne Amerikan University School of Sports

players. **Methods:** Twenty professional male volleyball players (average age 24.5±1.1 years; mean body height 186.5±5.02 cm; mean body mass 75.34±8.39 kg) participated in this study voluntarily. The subjects were informed about the possible risks and benefits of the study and gave their informed consent to participate in this study. The study was conducted over a 1-week period, during which the players did not participate in any other training or matches. On the first day, the players participated in anthropometric measurements (body height, body mass) followed by a squat jump, countermovement jump tests. Isokinetic leg strength tests were conducted on the third day. Then, on the fifth day, players performed the sprint and agility test. An isokinetic dynamometer (Cybex Humac Norm 770, USA) was used to measure knee flexion and extension torque. Vertical jump performance was measured using a portable force platform (Newtest, Finland). Times were measured using an electronic timing system (Prosport TMR ESC 2100, Tumer Engineering, Ankara, Turkey). For each player, isokinetic concentric muscle strength tests were performed at 60°/s and 300°/s, jump performance was evaluated by countermovement jump (CMJ) and squat jump (SJ) tests, sprint ability was determined by single sprint performance (10-30 m), and agility performance was measured using the T drill agility test. The relationships between isokinetic knee strength, sprinting ability, agility and vertical jump performance were evaluated using Pearson Product Moment Correlation analysis. Results: Knee extensor and flexor muscles strength of among peak torque were significantly correlated with at 60°/s, 300°/s contraction velocities and SJ, CMJ (p< 0.05). There was no significant correlation between isokinetic knee strength and field tests (sprinting, agility) (p>0.05). Moreover, strong relations were found between the performances of athletes in different field tests (p< 0.05). Conclusion: The findings of the present study indicated that the evaluations of isokinetic strength of knee extensors / flexors muscles and some field tests (agility, vertical jump performance and sprinting ability) values were important in order to inform the trainer for development about team's performance. The use of correlation analysis is the limitation of the study.

Keywords: Voleyball, Isokinetic Leg Strength, Vertical Jump, Agility, Speed

PP. 203 THE COMPARISON OF SOME MOTORIC AND TECHNICAL CHARACTERISTICS BETWEEN THE PLAYERS OF 12 DEV ADAM BASKETBALL SCHOOL AND THE PLAYERS OF TOFAS BASKETBALL SCHOOL (SAMPLE IN VAN)

<u>Yıldırım Gökhan Gencer</u><sup>1</sup>, Mehmet Bülent Asma <sup>1</sup>

### **Abstract**

At this study the comparison of some motoric and technical characteristics was aimed between the Players of 12 Dev Adam Basketball School and the Players of TOFAS Basketball School who are continuing their studies in Van. The study was realized with two groups-consisting of 15 players between the age of 10-12 who are trained at these basketball schools. Motoric and technical tests at this study were put into practice in the third week after the beginning of the course and in two weeks before the ending of the course. These tests include weight of body, the measurement of height, vertical jumping, sit and reach test, 30 meters speed test, shot, lay-up and dribbling tests. In order the average values were found as followed; the ages of the group Tofas  $11,133 \pm 834$  and the ages of the group of 12 Dev Adam  $11,200 \pm 0941$ , before the season their heights  $143,60\pm4,33$  cm,  $143,73\pm6,99$ cm, their weights  $41.91\pm4.74$  kg,  $41.30\pm7.15$  kg, vertical jumping  $36.27\pm5.97$ ,  $31.07\pm4.23$ , flexibility 17,73±3,83, 15,77±5,32, 30 meters speed test values 6,333±0,45, 6,647±0,639, dibbling values 21,82±2,4, 21,42±2,85, shot values 24,47±4,49, 23,73±6,95, lay-up values 24,8±25,1, 20,7±21,9, after season their heights 146±4,91 cm, 145,77±7,20 and the weights of their bodies 44,23±4,68 kg, 43,73±7,4 kg. Another meaningful difference wasn't found between two groups (except for average values of vertical jump which they had before season) (P<0.05). However statically the players' own developments were found meaningful. Although vertical jumping values of the players of Tofas Basketball School were high before the season, the reason of reducing that difference between values after the season are thought that are resulted from the standard part and necessary movements applied

<sup>&</sup>lt;sup>1</sup> Yüzüncü Yıl University School of Physical Education and Sports

to the players of 12 Dev Adam Basketball School.

Keywords: Basketball, Basketball Schools, Motorik Characteristics, Technical Characteristics

# PP. 207 EVALUATION OF ANTHROPOMETRIC CHARACTERISTICS OF TURKISH CANOE NATIONAL TEAM ATHLETES

 $\underline{\text{C. Cağlar Bıldırcın}}^1$ , Funda Coşkun  $^1$ , Çiğdem Özdemir  $^2$ , Özgür Günaştı  $^2$ , Kerem Tuncay Özgünen  $^2$ , Sanlı Sadi Kurdak  $^2$ 

### **Abstract**

**Purpose:** It is important to know the general anthropometric characteristics of Olympic-level athletes to interpret the expectations in terms of international sports success. In our study 14 male national canoe athletes, age  $19.1\pm4.3$  year (mean  $\pm$  SD), body weight  $76.3\pm8.4$  kg, and length  $1.78\pm.07$  cm anthropometrics assessment was performed.

Material and Methods: Skinfold thicknesses of the athletes were measured from 4 different points of the body (biceps, triceps, suprailiak, subscapular) by the Holtain brand caliper which is applies 10g pressure per 1 mm². Body fat percentage (Fat %) and body muscle percentage (Muscle %) calculated by Siri equation and Martin-Matiegka formula respectively. Furthermore, sitting height, arm span and biceps circumference measurements were made with a precision of 1mm. Hand grip strength measured by Lafayette Hand Dynamometer brand device. Maximal oxygen uptake values were determined via gas analysis (Quark b²) with canoe ergometer (Dansprint brand).

Results: When national athletes' variables were examined we found that MaxVO<sub>2</sub>; 51,55±5,39 ml.kg<sup>-</sup>

<sup>1</sup>.min<sup>-1</sup>, sitting height 95.07±3.09 cm, arm span 182.8±.08 cm, biceps circumference(flexion) 35.9±2.47 cm, right and left hand grip strength 50.80±10.51 kg and 49.07±10.57 kg respectively. Especially MaxVO<sub>2</sub> values were determined approximately 5 percent lower compared to the literature values.

**Conclusion:** In order to achieve high levels performance of athletes, enhancing athletic aerobic capacity and muscle mass training is essential to add to their work out program. This type of analysis is important to be scientific reference point for the design of high-level training programs.

Keywords: Key Words: Canoe, Maxvo2, Anthropometry, Fat Percentage, Muscle Percentage

# PP. 208 RELATIONSHIP BETWEEN ANTHROPOMETRIC PARAMETERS AND 100 METER FREESTYLE SWIMMING TIME OF ELITE SWIMMERS

 $\underline{\text{C. Cağlar Bıldırcın}}^1$ , Funda Coşkun  $^1$ , Çiğdem Özdemir  $^2$ , Özgür Günaştı  $^2$ , Kerem Tuncay Özgünen  $^2$ , Sanlı Sadi Kurdak  $^2$ 

### **Abstract**

**Purpose:** Technique, strength and endurance significantly affect the performance in sports such as swimming that the swimmer's anthropometric characteristics are also known to be important point. In the present study, we aimed to evaluate both the sportive performance and anthropometric characteristics of 35 elite young swimmers (20 men, 15 women) aged between 13 and 18.

**Material and Methods:** Skinfold thickness of the athletes were measured from 4 different points of

<sup>&</sup>lt;sup>1</sup> Cukurova University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Çukurova University Faculty of Medicine Department of Physiology

<sup>&</sup>lt;sup>1</sup> Çukurova University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Çukurova University Faculty of Medicine Department of Physiology

the body (biceps, triceps, suprailiac, subscapular) by the Holtain brand caliper which applies 10g pressure per 1 mm². Body fat percentage (fat %) and body muscle percentage (muscle %) calculated by Siri equation and Martin-Matiegka formula respectively. Moreover, we also used as a reference their personal best 100 meters free style swimming time that recorded in the 25-meter pool. Datas are evaluated separately for male and female swimmers and searched for meaningful relationship by correlation analyzing (SPSS V21).

### **Results:**

Swimmers' body weight, body mass index (kg/m²), body muscle and fat percentage, upper body length (cm) and 100 meters free style swimming (sec.) values are given for female and male, mean  $\pm$  SD respectively. For female; BW (kg)=56.8  $\pm$  5, BMI (kg/m²)= 20.5  $\pm$  1.5, Muscle %=44.9  $\pm$  4, Fat %=18.5  $\pm$  2.7, Upper body length(cm)=86.6  $\pm$  2.4, 100m free style (sec.), 59.25  $\pm$  .98. For male; BW (kg)= 70.4  $\pm$  7.6, BMI (kg/m²)= 22.1  $\pm$  2, Muscle %=41.8  $\pm$  1.8, Fat %=12.4  $\pm$  3.5, Upper body length(cm)= 92.2  $\pm$  3.4, 100m free style (sec.), 55.75 $\pm$  2.67

Conclusion: According to the results of the correlation analysis, the most important determinants of the 100-meter freestyle performance are BMI (p<0.001) and upper body length (p<0.05) for male swimmers. In this evaluation we found that especially the upper body length is one of the most important criteria to determine the high performance athlete. Lower BMI is can also be interpreted as one of the main variables. The relevant reference values of the topic should be studied in comprehensively for different techniques and distance.

Keywords: Key Words: Swimming, Fat Percentage, Muscle Percentage, Upper Body Length

# PP. 209 ANALYSIS AND EVALUATION OF BALL CONTACT NUMBER OF THE PLAYERS IN GOALS SCORED IN FIFA 2014 WORLD CUP

Erhan Işıkdemir <sup>1</sup>, Olcay Mülazımoğlu <sup>2</sup>, Hamit Cihan <sup>3</sup>, Sinan Çelikbilek <sup>2</sup>, Murat Erdoğdu <sup>4</sup>

### **Abstract**

**Aim:** The purpose of the present research is analyzing and evaluating of ball contact number, the place and style of scoring goals in goal shots of the players who scored goals in the matches in FIFA 2014 World Cup.

Method: 136 goals scores in 48 matches played in groups in 2014 World Cup organized in Brazil by FIFA (International Federation of Association Football) were evaluated. The scored goals were grouped into three categories in terms of ball contact style; "Scored in Single Contact (SinC)", Scored in Two Contacts (TwoC)", and "Scored in Three or More Contacts (ThreeC)". The place where the goal was scored was categorized according the place of last contact as "In Penalty Area (IPA)" and "Out of Penalty Area (OPA)". The scoring style was evaluated under 4 categories as; "Foot Shot, Head Shot, Penalty Kick and Own Goal". The matches played were recorded from TV and loaded into computer to analysis packaged software. The goals scored in matches were analyzed using notation technique on computer. "eAnalyze Soccer" (produced by E-spor Digital Co. Ltd. Ankara) match analysis program was used for analyses. Matches were analyzed separately and data related to the variables of ball contact number, goal kick style and goal kick place of the players who scored the goal. Frequencies and the percentages of the variables were defined and presented.

**Findings:** According to the obtained data, a total of 136 goals were scored, the distribution of these goals in terms of ball contact numbers is as follows: SinC=80 goals (58.82%), TwoC=36 goals (26.47%), and ThreeC=16 goals (11.76%); and in addition 4 goals were detected as own goals

<sup>&</sup>lt;sup>1</sup> Muğla Sıtkı Koçman University Institute of Health Sciences School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Muğla Sıtkı Koçman University School of Physical Education and Sports

<sup>&</sup>lt;sup>3</sup> Karadeniz Technical University School of Physical Education and Sports

<sup>&</sup>lt;sup>4</sup> Necmettin Erbakan University Faculty of Tourism Department of Recreation Management

(2.94%). Distribution of the goals according to the goal kick place is as follows: IPA=105 goals and OPA=19 goals and penalty kick=8 goals and own goal=4 goals. Examination of the ball contact number according to the place of goal kick revealed that, 37 of the goals among 105 goals kicked IPA were foot shots, 31 of the goals were head shots with single contact; 28 of the goals were scored with two contacts and 9 of the goals were scored with three or more contacts. Among the 19 goals scores OPA; 4 of the goals were scored with single contact, 8 of the goals were scored with two contacts and 7 of the goals were scored with three or more contacts. Distribution of the goals according to shot style is as follows: foot shot=93 goals (68.38%), head shot=31 goals (22.79%), penalty kick=8 goals (5.88%), and own goal=4 goals (2.94%). The percentage of the SinC goals scored with foot shot OPA is 27.21%, and the percentage of scored with head shots is 22.79%. It was observed that these two values were close.

**Result:** The number of goals scored in World Cup matches with single ball contact has a high percentage; which reveals the importance of scoring goals with single contact. In addition, that goals scored in penalty area with head shots were observed to have a high percentage shows the importance of head shots. In this context, it may useful for football teams that trainers do practices of single shot with foot and head in the preparation period of the players.

Keywords: Soccer, Fıfa 2014 World Cup, Group Stage, Goal Analysis, Number Of Ball Contact

# PP. 210 COMPARISON OF THE ACUTE EFFECTS OF STATIC AND DYNAMIC STRETCHING EXERCISES ON FLEXIBILITY, AGILITY, AND ANAEROBIC PERFORMANCE IN PROFESSIONAL FOOTBALL PLAYERS

Cem Kurt<sup>1</sup>, İlkay Fırtın<sup>2</sup>

### Abstract

**PURPOSE:** The aim of this study was to compare the acute effects of static and dynamic stretching exercises on flexibility, agility, and anaerobic performance in professional football players.

**METHOD:** Twenty professional football players (age,  $25.3 \pm 4.3$  years; height,  $183.1 \pm 3.4$  cm; weight,  $79.1 \pm 4.1$  kg; football experience,  $11.1 \pm 2.2$  years) completed 3 different warm-up sessions with 24 h intervals. The first session consisted of only 5-min aerobic running (AR), and was used as a control and familiarization session. The second session consisted of 5-min AR plus 5-min static stretching (AR+SS; 6 different unilateral exercises with  $1 \times 20$  s hold for each extremity with 10 s intervals and 1 bilateral exercise with  $2 \times 20$  s hold). The third session consisted of 5-min AR plus 5-min dynamic stretching (AR+DS; 7 different dynamic exercises with  $2 \times 20$  s hold with 10 s intervals). The players performed the stand and reach flexibility test, Illinois agility test, and running-based anaerobic sprint test at the end of each session.

**RESULTS:** Analysis of variance showed that AR+SS increased agility performance ( $p \le 0.05$ ), while it decreased relative minimum power, relative average power, and relative maximum power ( $p \le 0.05$ ), which are components of anaerobic performance. AR+SS and AR+DS were more effective than AR for increasing flexibility ( $p \le 0.05$ ). However, the data were insufficient to determine whether AR+SS or AR+DS is more effective from each other for increasing flexibility (p = 0.79).

**CONCLUSION:** Based on the results obtained in this study, football players should avoid static stretching exercises before training and/or competitions to prevent possible decreases in anaerobic performance. In order to enhance flexibility, static and/or dynamic stretching exercises should be strictly applied in addition to aerobic running.

Keywords: Football, Static Stretching, Dynamic Stretching, Flexibility, Agility, Anaerobic Performance

<sup>&</sup>lt;sup>1</sup> Trakya University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Trakya University Institute of Health Sciences Department of Physical Education and Sports

# PP. 213 THE EFFECT OF ISOKINETIC EXERCISES PROGRAMS ON ATHLETES' UPPER AND LOWER EXTREMITY MUSCLE GROUPS

Armağan Şahin Kafkas<sup>1</sup>, Bekir Çoksevim <sup>2</sup>

### **Abstract**

In heathy people better muscular function and more powerful muscles mean a more active life. Upper and lower extremity muscles are the determiners of increasing athletic performance, and the prevention of injuries and to clearify the rehabilitation methods. This research exposed volleyball, basketball and handball athletes to strength exercises for their upper and lower extremity muscle groups (latissimus dorsi, pectoralis major, trapezius, abdominal, hamstring-quadriceps) two times a week to determine its effect on flexor-extensor muscle ratios, the amount of energy spent by athletes during exercises and metabolic threshold values. The research subjects were composed of 36 adult male volunteers who study at Inonu University are regular athletes. They were taken from 3 groups: 12 basketball, 12 volleyball and 12 handball players. Biometric measurements (height, body weight, body fat ratio, BMI), physical performance tests (sit and reach, vertical jump, 30 m dash) power parameter measurements (isokinetic knee and torso power), and metabolic velocity measure taken while exercising with an armband were taken at the beginning and at the end of an 8 week training period, with the aim of evaluating the differences of the training regime on the athlete groups. At the end of the research the results taken at the beginning and at the end of the training program applied to basketball, volleyball and handball players were analysed. While comparing sit and reach, vertical jump and 30 m dash results, isokinetic knee and torso strength, peak torque, and average strength values and hamstring-quadriceps ratio, significant differences were tested for (p<0.05). The groups' metabolic equalities, spent calorie values, and activity durations were also tested for significant meaningful differences (p<0.05). As a result, regular amplitude-increasing power exercises were found to increase dominant knee, non-dominant knee, and torso strength in athletes in different sports. Also, the volunteers especially positive change in H:O ratio is a rather important development with respect to muscle endurance characteristics and the prevention of potential extremity injuries. Because of this trainers should devote at least two days a week to torso and knee strengthening exercises when planning training programs.

Keywords: Isokinetic Exercise; Power; Strength; Dynamometer

# PP. 215 THE RELATIONSHIP OF THE ISOKINETIC KNEE STRENGTH AND COUNTERMOVEMENT-SQUAT JUMP IN SOCCER

Barış Gürol<sup>1</sup>, Evrensel Heper <sup>1</sup>

### **Abstract**

**Purpose:** The aim of the study was to investigate the relationship between isokinetic knee strength and jumping performance of the soccer players.

**Method:** Voluntary 59 male soccer players [U14 team (n=21), U15 team (n=18), U16 team (n=20)] from three different age groups of Eskişehirspor Soccer Team were participated to the study. Squat jump, counter-movement jump and 60°.sec<sup>-1</sup> and 180°.sec<sup>-1</sup> isokinetic knee strength were tested. The difference among three age groups was tested with One Way Anova after homogeneity of variances and significance level was taken as p<0.05. The relationships were tested with Pearson Correlation.

**Findings:** The average counter-movement jump test results of the soccer was;  $U14=29.90\pm4.44$ cm,  $U15=35.89\pm5.68$ cm and  $U16=35.70\pm2.05$  respectively.

The average squat jump test results of the soccer was; U14=27.14±3.51, U15= 33.33±4.79cm and

<sup>&</sup>lt;sup>1</sup> İnönü University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Ercives University Faculty of Medicine Department of Physiology

<sup>&</sup>lt;sup>1</sup> Anadolu University Faculty of Sport Sciences

U16=32.90±2.07 respectively.

The isokinetics right knee extension/flexion strength of the U14 team was  $ext60^{\circ}.sn^{-1}=150.62\pm40.70$ ,  $flex60^{\circ}.sn^{-1}=108.48\pm30.12$ , ext300°.sn<sup>-1</sup>=71.19±19.38,  $flex300^{\circ}.sn^{-1}=68.90\pm16.24$  respectively. The isokinetics left knee extension/flexion strength of the U14 team was ext60°.sn<sup>-1</sup>=148.95±38.54.  $flex60^{\circ}.sn^{-1}=107.05\pm31.37$ , ext300°.sn<sup>-1</sup>=71.71±18.28,  $flex300^{\circ}.sn^{-1}=70.71\pm17.72$  respectively. The isokinetics right knee extension/flexion strength of the U15 team was  $ext60^{\circ}.sn^{-1}=171.27\pm33.85$ .  $flex60^{\circ}.sn^{-1}=124.22\pm20.37$ , ext300°. $sn^{-1}=82.50\pm12.45$ ,  $flex300^{\circ}.sn^{-1}=73.56\pm8.45$  respectively. The isokinetics left knee extension/flexion strength of the U15 team was ext60°.sn<sup>-1</sup>=170.33±39.06,  $flex60^{\circ}.sn^{-1}=123.00\pm26.82$ , ext300°.sn<sup>-1</sup>=84.83±17.50,  $flex300^{\circ}.sn^{-1}=74.61\pm12.53$  respectively. The isokinetics right knee extension/flexion strength of the U16 team was ext60°.sn<sup>-1</sup>=186.60±24.83.  $flex60^{\circ}.sn^{-1}=129.75\pm18.30$ , ext300°.sn<sup>-1</sup>=85.05±14.91,  $flex300^{\circ}.sn^{-1}=72.25\pm11.83$  respectively. The isokinetics left knee extension/flexion strength of the U16 team was ext60°.sn<sup>-1</sup>=179.10±31.30,  $flex60^{\circ}.sn^{-1}=123.10\pm19.98$ , ext300°.sn<sup>-1</sup>=83.55±11.87,  $flex300^{\circ}.sn^{-1}=74.05\pm8.94$  respectively. Results: Result showed that, there was significant differences between isokinetic knee strength parameters of three different age groups. And there was significant differences between jumping performance of the groups. There was high significant relationship between isokinetic knee strength and jumping performance. As a result of this research the isokinetic knee strength and jumping performance are increasing with age.

Keywords: Isokinetic Knee Strength, Jumping Performance, Soccer

# PP. 242 THE EXAMINATION OF EFFECT ON ANTHROPOMETRIC CHARACTERISTICS AND MOTOR ACTIVITIES OF INFRASTRUCTURE TRAINING AT SOCCER

 $\underline{\ddot{\text{O}}\text{zg\"{u}r}}$  Dinçer  $^1$ , Hasan Sözen  $^1$ , Ercüment Erdoğan  $^1$ , Erdal Arı  $^1$ , Burkay Cevahircioğlu  $^1$ , Ercüment Gedik  $^2$ 

### Abstract

**Purpose:** The examination of changes at some anthropometric characteristics and motor activities of soccer players placing 10-12 age categories by infrastructure trainings performed periodically.

**Method:** The twenty-nine soccer players from soccer school of Galatasaray Sport Club at Fatsa district of Ordu province join to this study. The soccer players performed trainings half-weekly throughout thirty-six week. Pre-test and post-test values of height, weight, triceps, suprailiac, subscapula and abdomen fat, biceps flexion and extension, chest, abdomen, hip, thigh and calf circumstance, upper extremity, upper arm, forearm, inferior extremity, thigh and leg length were measured by anthropometric measure set and fat percentage of body (BF%) and body mass index (BMI) were calculated by Yuhaz formula. The 20 m. sprint, ball throwing, standing long and vertical jump and flexibility tests were done as motor activity tests by Newtest test system. The difference between pre-test and post-test values was determined by Wilcoxon test at SPSS package programme.

**Results:** The significiant differences between pre-test and post-test weight, chest, abdomen, hip and calf circumstance, upper extremity, upper arm, forearm, inferior extremity and leg length, fat percentage of body (BF%), body mass index (BMI), 20 m. sprint, flexibility and ball throwing values were determined (p<0.05).

**Conclusion:** It was determined that soccer infrastructure trainings performed periodically at children soccer players placing at 10-12 age categories developed anthropometric characteristics, basic motor activity and performance values of their.

Keywords: Soccer, Anthropometric Characteristics, Motor Activities

<sup>&</sup>lt;sup>1</sup> Ordu University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Samsun 19 Mayıs University Faculty of Sport Sciences

# PP. 243 THE EFFECT ON SWIMMING PERFORMANCE OF THE LAND TRAINING IN 13 YEAR OLD SWIMMERS

Evren Ebru Altıncı<sup>1</sup>, Burçak Keskin<sup>2</sup>, Tuğçe Laçin<sup>3</sup>

- <sup>1</sup> İstanbul University School of Physical Education and Sports Department of Movement and Training Science
- <sup>2</sup> İstanbul University School of Physical Education and Sports Teaching of School of Physical Education and Sports

### **Abstract**

The aim of this study 13 years in boy and girl swimmers swimming performance is to examine the effect of training on dryland.

Swimmers who will compete in international platform need to make 8-12 swimming trainings and 3-5 ground trainings in a week. If considered that training durations and driven distances as 80-90 Kms and 22-26 hours, we see that important part of trainings is ground trainings. The excersises like maximum power, rapid power, strength, movement range, strengthening of movement range, stretching are planned and done considering the age, sex, training age and personal quality to improve motoric skils of sportsmen.

The aim of studies are to pull the water strongly, pushing strongly, and for leg kick. Creating force, flexibility and speed of increasing the development work is passed through the land studies. But this, weight-trainings and exercises does not mean that it provides to consisting of power and mobility. Carefully planned program should be applied to take optimum result. Zayıf planlanmış programlar, negatif sonuçlar verebilir. Weakly planned programs should present may give negative results. Thus, land trainings should be planned exhaustively.

Located in Istanbul, Fenerbahce Sports Club Swimming Branch 19 athletes who participate in competitions in the age group of 13 (10 male and 9 female) were included in measurement. Dryland training 3 days a week for 8 weeks (Monday-Wednesday-Friday) swimming training was conducted 6-7 days. Athlete of the was determined average height of 161.48 cm, average weight of 54.6kg.

It were used the pre-test and past-test statistical methods in order to identify differences Simple Paired t tests. The 50 and 25-meter freestyle swimming was found very significant difference (p < 001). In our study has been revealed as a statistical increase performance in athletes after exercise. As a result, the dryland training has been demonstrated positively affect the swimming.

Keywords: Swimming, Dryland Training, Performance, Exercise

# PP. 252 THE EFFECTS OF A 6 WEEK PLYOMETRIC TRAINING PROGRAM ON AGILITY IN TAEKWANDO STUDENTS AGED BETWEEN 12-15

Osman Ateş<sup>1</sup>, <u>Gülşah Aydın</u><sup>1</sup>

### Abstract

The purpose of the study is to determine the effects of plyometric exercises on agility, and to improve performance in Taekwando students aged between 12-15 who are competing in clubs.

The study group consists of 10 control group and 10 study group who are chosen randomly from competing students aged 12-15. There are no risks factors involved in the study; all the atheletes who participated in this study are volunteers and have permission from their parents. They are healthy young boys and girls that are licensed athletes. Only athletes who are physically healthy and who do not have any chronic ilnesses are accepted to this study. Students have been informed that they could

<sup>&</sup>lt;sup>3</sup> Trainer of Swimming

<sup>&</sup>lt;sup>1</sup> Marmara University School of Physical Education and Sports

leave the study any time, if they do not want to participate.

To the study group for 6 weeks 2 days per week, 15 minutes plyometric excercises have been added as drills between their regular 60 minutes Taekwondo training after 5-10 minutes warming up sessions. A one-day training program of the study group has been planned as general warming up, plyometric exercises, streching, main training and cool down session.

For the statistical analysis, SPSS's software program Mann-Whitney U test was used. The agility T Test measurement results shows that, there is a significant difference on agility between the control group and the study group before and after the study (p<0,05). The study group's agility has been increased.

As a result, it is recommended that plyometric exercises should be included in Taekwondo training to increase agility in athletes performances.

Keywords: Taekwondo, Plyometric Training, Agility

### PP. 257 AGE RELATED DIFFERENCES IN SPRINT PERFORMANCE OF TURKISH SOCCER REFEREES

 $\underline{\text{Atakan Yılmaz}}^1$ , Erkan Özdamar  $^1$ , Ayşe Kin-İşler  $^2$ 

### **Abstract**

**Objectives:** During a soccer game sprinting have been shown to range from 0.5 % to 12 % of total match distance covered by an elite level soccer referee (D'Ottavio et al. 2001) and it is known that sprinting is affected by the ageing. Hence the purpose of this study was to determine age-related differences in sprint performance of Turkish soccer referees.

**Methods:** 60 Turkish male soccer referees (young (n=33): 24.6±1.9yrs; old (n=27)=32.2±2.8yrs) participated in this study voluntarily. Subjects sprinting abilities was determined by 10m, 20m, 30m and 50m sprints and by a 12x20m running repeated sprint ability test with 20s recovery durations. For the repeated sprint test subjects' best sprint time (BST), total sprint time (TST) and percentage of performance decrement were determined for 0-10m, 10-20m and 0-20m.

**Results:** Results indicated significant differences between young and old soccer referees in 10m sprint (t=-2.157; p=.035), 30m sprint (t=-2.669; p=.010), best sprint time for 0-20m(t=-2.669;p=.010) and total sprint time for 0-10m (t=-3.352; p=.001) and for 0-20m (t=-2.090; p=.041) in favour of young referees.

**Conclusion:** It can be said that older referees should do more single and repeated sprint training to overcome ageing and keep up with the rhythm of the game.

Keywords: Soccer Referees, Sprint Performance, Age

# PP. 283 THE EFFECT OF AGE AND GAME POSITIONS ON DRIBBLE SPEED, A CYCLING SPEED AND PASS ABILITY IN SOCCER

### Aykut Eren Canüzmez<sup>1</sup>

### Abstract

**Purpose:** The purpose of the study was to examine whether dribble, a cycling speed and pass ability may vary in terms of age and game position

**Method:** 242 male players whose ages ranging from 14 to 19 participated to the study. Subjects were recruited from youth development teams of the four professional football clubs in Izmir. To determine

<sup>&</sup>lt;sup>1</sup> Başkent University Department of Sport Sciences

<sup>&</sup>lt;sup>2</sup> Hacettepe University Department of Exercise and Sports Performance

<sup>&</sup>lt;sup>1</sup> Ege University School of Physical Education and Sports

players a cycling speed, dribble speed and pass ability Illinois and Loughborough tets were used respectively. In the analyses of obtained data set ANOVA, Pearson corelation and Regression analyses were carried out.

**Results:** Pearson correlation analysis showed that a cycling speed without ball is positively and significantly correlated to a cycling speed with ball (dribble) (r=.41, p=.001) and pass ability (r=.16, p=.016). Correlation analyses also showed that dribble speed is significantly associated with pass ability (r=.21, p=.001).

In order to determine predictive ability of the dribble speed and a cycling speed without ball for pass ability regression analyses was carried out. Results show that regression model consisting of dribble speed and a cycling speed without ball explained significant but yet small amount of variance in pass ability ( $R^2 = .06$ ; F (2. 239) = 7. 125, p= .001).

To test the effect of position and dribble speed on a cycling speed without ball a two way ANOVA was carried out. Two way ANOVA as a cycling speed without ball is dependent variable showed the significant effect of age F (4, 241) = 14.99; p = .001 and position F (2, 241) = 5.092; p = .007. However position-age interaction was not significant F (8, 241) = 1.02; p = .417.

Two way Anova as dribble speed was dependent variable showed the significant main effect of age F (4.241)=7.527; p= .001 and position F(2,241)= 6.154; p=.002. However position-age interaction F (8.241)=1.06; p=.389 was not significant.

Two way Anova as pass ability was dependent variable showed the significant main effect of position F(2.241)=4.425; p=.013. However age F(4,241)=1.311; p=.267 and position-age interaction F(8.241)=.868; p=.544 was not significant.

**Conclusion:** It is observed that there was significant correlation between pass ability, dribble speed and a cycling speed and players who were faster at dribble even a cycling without ball.

It is found that there was significant effect on dribble speed between position and age, however position-age interacton was not significant.

It is observed that pass ability has a significant effect on position; whereas, it was believed that it has no significant effect on age and position-age interacton.

Keywords: Football, Position, Pass Ability, Dribble Speed, A Cycling Speed

# PP. 288 THE EFFECT OF PRESEASON TRAINING PROGRAM ON PHYSICAL AND PHYSIOLOGICAL PARAMETERS ON AMPUTEE FOOTBALL PLAYERS

Haci Yıldız<sup>1</sup>, Mürsel Biçer<sup>2</sup>, Bekir Mendeş<sup>2</sup>, Fırat Akcan<sup>2</sup>

### **Abstract**

**Aim:** Purpose of this study was to investigate the effect of six week preseason training program on amputee soccer players regarding some physical and physiologic parameters. **Methods**: Şahinbey Municipality Sports Club and Gaziantep Disabled Persons Sports Club amputee football players who were between 19-50 years old, were included in this study as voluntary. The teams were applied 6 weeks preseason training program. In this study, the amputee football players were applied some tests such as age, height and weight, back strength, leg strength, hand grip strength, flexibility, vertical jump, body fat percentage, 30 m sprint, and 1 mile run. For the evaluation of the obtained data, SPSS 16.0 statistic program was used. Paired Samples T test was used to analysis of difference between the pre and post tests of research group. **Findings:** According to pre and post test measurements of the test subjects, significance level was found in body weight, body fat percentage, hand grip strength, back strength, leg strength, flexibility, anaerobic power, 30 m sprint and MaxVO<sub>2</sub> parameters (p<0.05).

**Result:** As a result, it can be said that there is positive effect of 6 weeks preseason training program on physical and physiological parameters.

Keywords: Amputee, Soccer, Training, Physical, Physiologic

<sup>&</sup>lt;sup>1</sup> Gaziantep Province National Education Directorate Mustafa Gürbüz Necat Bayel Anatolian High School

<sup>&</sup>lt;sup>2</sup> Gaziantep University School of Physical Education and Sports

# PP. 301 EFFECTS OF SPORTS MASSAGE AND STATIC STRETCHING EXERCISES ON LACTATE DISAPPEARANCE IN NATIONAL MALE JUDO ATHLETES

Mesut Öztürk <sup>1</sup>, Cem Kurt<sup>2</sup>

### Abstract

**PURPOSE**:The aim of this study was to compare the effectiviness of sports massage and static stertching exercises in eliminating lactate.

**METHOD**:Ten national male Judo athletes (age,  $22.0 \pm 1.8$  years; height,  $1.77 \pm 0.09$  m; mass,  $82.0 \pm 22.2$  kg; judo experience,  $12.3 \pm 2.9$  years) were allocated into two groups using simple randomization method. The groups were named as sports massage (n=5) and stretching group (n=5) After *Randori* ( $5 \times 10$  min with 5 min interval), 4 minutes of sports massage (effleurage, friction and vibration) was applied to massage group, whereas, the stretching group performed 4 minutes static stretching exercises (Standing groin stretch, Standing soleus stretch, Quadriceps static stretch, Hip flexor static stretch and Eagle straddle). Blood lactate concentrations ([La]) were measured from fingertip samples using Lactate Scout analyzer at rest ([La]<sub>r</sub>), immediately after Randori ([La]<sub>R</sub>), massage ([La]<sub>M</sub>) and stretching exercises ([La]<sub>S</sub>).

**RESULTS**:The results of Mann-Whitney U tests showed that there was no significant difference in [La] at none of the measurement time points between the study groups (p > 0.05). The results of Wilcoxon signed-rank tests performed after Friedman's tests (p = 0.007) revealed that there were significant differences in [La] between each paired time points ([La]<sub>R</sub> > [La]<sub>M</sub> or [La]<sub>S</sub> > [La]<sub>r</sub>) both for massage group (p = 0.043 for all pairwise comparisons) and stretching group (p = 0.043 for all pairwise comparisons).

**CONCLUSION**: The results obtained from this study revealed that sport massage or static stretching exercises were not superior to each other in eliminating lactate. In addition, elimination of lactate observed in both groups after treatment (massage or stretching) may be just due to natural physiological processes (time effect) as no control group was included in the study. Therefore, similar studies should be conducted with larger sample sizes and a control group (passive group) to clarify this issue in more detail.

Keywords: Static Stretching, Sports Massage, Blood Lactate, Randori, Judo

# PP. 302 THE EFFECT SHORT TERM WEIGHT LOSS OF SALIVA CORTISOL AND SALIVA TESTOSTERONE AND PERFORMANCE INDEX IN YOUNG WRESTLERS

Abdorreza Eghbal Moghanlou<sup>1</sup>, Mohammad Ali Azarbayjani<sup>2</sup>, Hassan Matin Homaei<sup>3</sup>

### **Abstract**

The present study investigated the effect of short-term weight loss on salivary free testosterone, cortisol and performance indicators Doroud city was young wrestlers. The samples included 14 people of young wrestlers with a mean age of  $82/0 \pm 07/18$  years, average height  $46/4 \pm 07/172$  cm, weight  $44/8 \pm 04/70$  and BMI  $05/2 \pm 21/23$  that were selected to be targeted. In this study, the salivary free

<sup>&</sup>lt;sup>1</sup> Turkish Judo Federation Committee of Health

<sup>&</sup>lt;sup>2</sup> Trakya University Kırkpınar School of Physical Education and Sports Department of Coaching Education

<sup>&</sup>lt;sup>1</sup> Mohaghegh University School of Physical Education and Sports Sciences

<sup>&</sup>lt;sup>2</sup> Islamic Azad University Central Tehran Branch Department of Physical Education and Sport Sciences

<sup>&</sup>lt;sup>3</sup> Islamic Azad University Central Tehran Branch Department of Physical Education and Sport Sciences

testosterone, cortisol and performance indicators were measured in two phases. The first phase of sampling on the first day, the hour 7/30 in the morning and were done simultaneously. Within ten days of pre-test stage, the second phase of sampling in the 7/30 was done in the morning simultaneously. Functional test before the test, the day before the first sampling, at 14 pm to 15 pm and was done simultaneously. Functional test after test after the second phase sampling And 14 pm to 15 pm and was done simultaneously. Laboratory studies results, performance, and the statistical analysis shows that the short-term and rapid weight loss on free testosterone concentrations in saliva, Salivary cortisol, salivary free testosterone to cortisol ratio, upper extremity strength and agility have no significant effect. The aerobic training group showed a significant reduction of rapid weight loss, But this effect was not significant in the short-term weight loss.

Keywords: Wrestlers, Weight Loss, Salivary Free Testosterone, Cortisol

# PP. 338 THE EFFECT OF 6 WEEKS HOCKEY TRAINING PROGRAMME ON CHILDREN'S PHYSICAL AND PYHSIOLOGICAL PROPERTIES FROM AGE 12-14

 $\underline{\text{Osman Sari}}^1$ , Mürsel Biçer  $^1$ , Alper Cenk Gürkan  $^3$ , Mustafa Özdal  $^2$ 

### **Abstract**

Aim: The purpose of this study was to investigate, the effect of 6 weeks hockey training programme on children's physical and pyhsiological properties from age 12-14. Methods: 12-14 age group hockey players in Gaziantep were icluded in the study as a voluntary. The players underwent a 6-week preparation period training program. In our study of hockey players; age, height and body weight, back strength, leg strength, hand grip strength, push-ups, sit-ups, vertical jump, body fat percentage, standing long jump, MaxVO2, aerobic and anaerobic power tests were performed. The obtained data were used for the evaluation of statistical program SPSS 16.0. the research group between pre-test and post-test analysis was performed for the Paired Samples T test. Findings: Preparatory period of voluntary pre-test and post-test measurements according to; body fat percentage, right hand and left hand grip strength, back strength, vertical Splash and anaerobic power parameters were significantly different (p <0.05). Voluntary pre-test and post-test measurements of the preparation period, according to; body weight, body mass index, leg strength, MaxVO2, push-ups, sit-ups and standing long jump parameters statistically significant difference was found (p> 0.05). Result: As a result, it can be said that to be positive effects of 6 weeks preparation period training programme on some physical and physiological parameters.

Keywords: Hockey, Training, Physical, Physiological

<sup>&</sup>lt;sup>1</sup> Ağrı City Youth And Sport Directorate Ağrı City Youth and Sport Directorate

<sup>&</sup>lt;sup>2</sup> Gaziantep University School of Physical Education and Sports

<sup>&</sup>lt;sup>3</sup> Gazi University Health Services Vocational Schools

# PP. 339 THE EVOLUTION OF PHYSICAL FITNESS RELATED TO PERFORMANCE OF PRIMARY AND SECONDARY SCHOOL STUDENTS IN THE AGE GROUP 8-12

Ahmet Yıkılmaz<sup>1</sup>, Mürsel Biçer<sup>2</sup>, Alper Cenk Gürkan<sup>3</sup>, Mustafa Özdal<sup>2</sup>

### **Abstract**

Aim: Purpose of this study is according to gender and age investigation of physical fitness related to performance of primary and secondary school students who are 8-12 years old. Methods: 118 students who were from primary and secondary schools in Gaziantep were participated in this study. Measurements were applied as physical and physiological parameters such as age, height, weight, body mass index, body fat percentage, flexibilty, MaxVO2, hand grip strength, back strength, vertical jump and anarobic power. SPSS 16.0 program used for statistical analysis. Independent Samples T test vas used for binary groups, One Way ANOVA and Scheffe tests used for multiple groups. Findings: According to gender variable, significance was found in height, weight, body mass index, MaxVO2, right and left hand grip strength, back strength parameters. According to age variable, significance was found in height, weight, MaxVO2, vertical jump and anarobic power. Result: As a result, it is said that physical fitness parameters have shown paralel development with age; and female students had higher results than male students because of development period.

Keywords: Primary School, Secondary School, Performance, Physical Fitness

# PP. 341 INVESTIGATION THE EFFECTS OF 6 WEEKS PILATES EXERCISE ON BIOMOTORICAL AND SELF ESTEEM OF YOUNG WOMEN

Özhan Bavlı<sup>1</sup>, Özlem Köybaşı <sup>1</sup>

### **Abstract**

Purpose: pilates is the famous exercise type among women. Althouh pupularity there is no enough study about the effects of pilates exercise on biomotorical and self esteem. Because of this reason the purpose of this study was the investigate the effects of six weeks pilates exercise on flexibility, balance, abdominal strength and self esteem of young women.

Method: Totally 22 women (mean age;  $20,1\pm2,2$  year) who were no license in a sport branch, no health problem and did not have pilates exercise before, participated in to the study voluntary. Participants divided in to the two gorups (experiment:10, control: 12) randomly. Experiment group did pilates exercise fors ix week, two days per week with one hour duration. Control group did nothing. Pretets and post tets measurements of body height, body weight, flexibility, balance, abdominal strength and self esteem performed. SPSS used for analysis.

Findings: There was statistical findings (p<0,05) on pretest and post test measurements of experimental group of flexibility (pretets  $21,6\pm7,2$  cm, post test  $27,3\pm8,6$  cm), abdominal strength (pretest  $18,9\pm7,1$  repeat, post test  $34,6\pm8,2$  repeat) and self esteem (pretest  $76,4\pm10,5$  post test  $85,6\pm6,1$ ) variables. That wariables positively effected after six weeks. On the other hand only the abdominal strength of control group was statically changed (p<0,05) after six week (pretest  $28,1\pm12,9$  repeat, post test  $30,2\pm14,1$  repeat). When comparison the measurement pretest and post test differences of two groups, there was a statistical differences about flexibility (t:2,247 p:0,015), balance (t:1,033 p:0,037) and abdominal strength (t:7,229 p: 0,051).

Conclusion: According to findings it is possible to say that six weeks of pilates exercise is the proper exercise type for training young womens' biomotorical variables. Also it can be advice that for positive effecting to self esteem pilates works are preferable exercise methods for young women.

Keywords: Pilates, Sport, Women, Biomotorical, Self Esteem

<sup>&</sup>lt;sup>1</sup> Ministry of Youth and Sport Ankara Provincial Directorate of Youth Services

<sup>&</sup>lt;sup>2</sup> Gaziantep University School of Physical Education and Sports

<sup>&</sup>lt;sup>3</sup> Gazi University Health Services Vocational Schools

<sup>&</sup>lt;sup>1</sup> Canakkale Onsekiz Mart University School of Physical Education and Sports

# PP. 345 COMPARING THE CAPACITY OF TOTAL OXIDANT AND TOTAL ANTIOXIDANT WHICH IS INDUCED BY ACUTE EXERCISE AMONG PROFESSIONAL FOOTBALLERS AND SEDANTERIES

Bekir Mendes<sup>1</sup>, Cengiz Arslan<sup>2</sup>, Müslüm Akan<sup>3</sup>, Mustafa Örkmez<sup>3</sup>

### **Abstract**

**Purpose;** In this research, it is aimed to analyse the levels of total oxidant (TOS), total antioxidant (TAS), oxidative stress index of acute exercise in footballers and sedantaries. Method; 20 footballers and 20 sedantary male volunteers participated in the research. Anthropometric features of bales from demographic information were determined with a digital length meter. TOS, TAS and OSI levels of bales were analysed by making them hold 2 half-times matches which last 45 minutes each and drawing blood samples before the match, after the match and 24 hours after the match. Evaluations were made in statistic package programme. In repetitive measurement comparisions, variance analyses (ANOVA), Bonferroni multiple comparisons were used to determine the difference. Results; The levels of (TOS-levels before and after the match) sedentaries were considered as high comparing the footballers (p<0.05). Though 24 hours after match TOS levels are different, it is not logical. TAS values after match are more meaningful than 24 hours after match and levels before match (p<0.01). Because of the increase in oxidant level, the levels before match and after match, OSI levels are found high in sedantaries. In conclusion, there is a meaningful increase in the levels of footballers' and Sedentaries after the acute exercise comparing the previous situation. Conclusion; It can be said that the acute exercise does not improve adaptation ability to oxidative stress and the harmful effects related to oxidation increase after the match.

Keywords: Acute Exercise, Football, Total Oxidant, Total Antioxidant

# PP. 360 EXAMINING THE RELATIONSHIP BETWEEN ANTROPOMETRIC CHARACTERISTICS, ATHLETIC PERFORMANCE AND FUNCTIONAL MOVEMENT ON ELITE LEVEL OF KARATE ATHLETES

Suat Yıldız<sup>1</sup>, Ertuğrul Gelen <sup>1</sup>, Enes Erkan <sup>1</sup>

### **Abstract**

**Introduction**:Karate is a sport branch in which intensive loadings are done by short intervals in flexible times (Iide K. Et al, 2008). While the aerobic (77.8±5.8%) system is used mainly in karate sport, anaerobic (16.0±4.6%) system is also used in certain movements (Beneke R. et al, 2004). Most of the loadings end up with knee and body rotation on single foot (Manuel M. Probst, et al. 2007). This situation points out the importance of upper body power together with lower body power as well as flexibility. It is necessary to keep balance while performing these movements. The Turkish National Karate Team which we measured antropometric characteristics is in a well enough position in world ranking. Athletic performance and functional movement screen have been compared in preparatory camp of the European Championship,. With the results obtained from the study it was aimed to determine relationship between the present states of athletes, their antropometric characteristics, performance and functional movement.

**Method**:Turkish National Karate Team's 9 athletes (Age: 25,1±3,9 years; height: 181,7±8,1cm; weight: 81,8±15,2 kg) who joined the preparatory camp of the European Championship participated in the study voluntarily. The research was done in Düzce district where the athletes had been in the preparatory camp. Antropometric measurements of athletes were done in the study primarily.

<sup>&</sup>lt;sup>1</sup> Gaziantep University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Firat University School of Physical Education and Sports

<sup>&</sup>lt;sup>3</sup> Gaziantep University Faculty of Medicine Department of Biochemistry

<sup>&</sup>lt;sup>1</sup> Sakarya University School of Physical Education and Sports

Afterwards, the body fat percentages were found by measuring skinfold thicknesses of the athletes. Following these measurements, after a 10-minutes warm-up (5 minutes jogging and dynamic stretching) the athletes successively applied flexibility (sit reach ), grip izometric power, backleg izometric power, balance (Y balance test), countermovement jump(CMJ) and squat jump and the functional movement level measured via FMS.

**Results**:Each variant in the research was associated independently. Analysis of correlation level was done by SPSS packet program with the datas obtained from the study

In the light of the datas;

Significant relationship between Body Mass Index (BMI) and body fat percentage (BFP) (p=0.002), humerus diameter (p=0.036), biceps circumference (p=0.000), calf circumference (p=0.000), flexibility (p=0.014), claw force (Flu R) (p=0.001) and functional movement screen (FMS) (p=0.027) was observed.

Significant correlation was found between BFP and BMI (p=0.002), humerus diameter (p=0.042), biceps circumference (p = 0.008), calf circumference (p=0.004), grip strength (p=0.001) and squat jump (SJ) (p=0.043).

Significant relationship between the humerus diameter and BMI (p=0.036), BFP (p=0.042), calf circumference (p=0.004), the right grip strength (p=0.018), left hand grip strength (p=0.023) and between femoral diameter (p=0.050) and SJ was observed.

Between biceps circumference and BMI (p=0.000), BFP (p=0.008), calf circumference (p=0.000), flexibility (p=0.008), the right grip strength (p=0.002), FMS (p=0.010) significant relationship between was observed.

Statistically significant relationship has been found between calf circumference and BMI (p=0.000), BFP (p=0.004), humerus diameter (p=0.019), biceps circumference (p=0.000), the right grip strength (p=0.003), FMS (p=0.017).

Significant correlation between flexibility and BMI (p=0.014), biceps circumference (p=0.008) was observed.

Statistically significant relationship has been found between right grip strength and BMI (p=0.001), BFP (p=0.001),humarus diameter (p=0.018), biceps circumference (p=0.002), Calf circumference (p=0.003), FMS (p=0.034).

Significant correlation between left hand grip diameter and the humerus diameter (p=0.023), back leg strength (p=0.020), the right balance (p=0.011) was observed.

Between back leg strength and BFP (p=0.499), left hand grip strength (p=0.020) a significant correlation was observed.

Significant correlation was observed between the right balance and left hand grip strength (p=0.011). Correlation was observed between the back leg strength (p=0.035) and left balance. Significant relationship has been found between FMS total and BMI (p=0.027), biceps circumference (p=0.010), calf circumference (p=0.017), back leg strength (p=0.011) and right grip strength (p=0.034).

A significant correlation between right balance and CMJ (p=0.016) was observed.

Between SJ and BFP (p=0.043), femoral diameter (p=0.050), left balance (p=0.040) a significant correlation was observed.

**Discussion**:This research was done to put forward the relationship between some antropometric characteristics of elite level karate players, athletic performance and functional movement. Despite the low level of participation in the study, it has been considered to get notably important datas since the participants in the study consist of the best karate players in Turkey and being in top 10 list in World and European rank. The most striking result of our study is detecting significant relationships between FMS and BMI, FMS and biceps and calf circumference, FMS and back- leg power and right grip strength. Moreover, another striking result is the significant relationship between FMS and flexibility, balance, vertical jump.In the literature, there are studies that report a significant relationship between athletic performance and FMS.(Cook, G., 2010; Okada, T., 2011). In these studies, especially balance, endurance, strength, and flexibility performance explosive strength were measured.

These findings are the first data of our study. We will continue to work following the development within the measurement .The data obtained will lighten us to follow development of the one's performance and efficiency in the training.

Keywords: Karate, Functional Movement, Fms, Athletic Performance

# PP. 362 INVESTIGATING THE RELATIONSHIP BETWEEN REGULAR PHYSICAL ACTIVITY PARTICIPANTS BODY MASS INDEX AND FUNCTIONAL MOVEMENT SCREEN

Oğuz Üçer<sup>1</sup>, Erkan Günay <sup>1</sup>, Aksel Çelik <sup>1</sup>

#### Abstract

**Introduction:** Biomotor performance affects the characteristic of mobility's and flexibility's standard parameters significantly. As the values and the performance decrease, negative effects would create the risk of injury. The Functional Movement Screen (FMS) is applied to determine the level of an individual's basic mobility and flexibility (Cook).

**Objectives:** The aim of this study is to determine the relationship between the individuals who are engaged in regular physical activity and healthy individuals who engage in any physical activity through using the FMS and Body Mass Index (BMI).

**Materials and Methods:** This study inherited 72 volunteered participants. The control group consists of 36 subjects – 18 men and 18 women – who did not participate in any physical activity. The experimental group consists of 36 subjects – 18 men and 18 women – who were engaged in regular physical activity. The volunteers' height, weight, and BMI were calculated then went through FMS. The FMS includes the following physical activities: deep squat, hurdle step, in-line lunge, shoulder mobility, active straight leg raise, trunk stability, push-ups and rotary stability. Results were evaluated with the SPSS 15.0 program and evaluated statistically with Mann Whitney U Test.

**Results:** The FMS results and BMI displays the differences between the control group and experimental group (p<0,05). Furthermore, gender based comparison displays significant differences between the parameters of the FMS.

**Conclusion:** It was seen that while improving regular fitness activity, mobility and flexibility, the gained BMI restricts individual's mobility and flexibility.

Keywords: Fitness, Functional Movement Screen, Mobility, Flexibility, BMI

# PP. 371 RELIABILITY OF THE NEW GENERATION POWER INDICES OF WINGATE ALL-OUT TEST

Ozgur Ozkaya <sup>1</sup>, Ekim Pekünlü <sup>1</sup>, <u>Bulent Yapıcıoglu</u> <sup>1</sup>

### **Abstract**

**PURPOSE**:Besides traditional Wingate all-out test (WAT) indices based on 5-second power means, recently available 894E Peak Bikes have also enabled to obtain new generation power indices such as time to sustain peak power (t@PP), maximum speed as the highest rpm ( $v_{max}$ ), power at maximum speed (P@ $v_{max}$ ), time at maximum speed (t@ $v_{max}$ ), decline in power (Dec@P) and total energy (Etot). However, there is no any study in the literature to evaluate retest reliabilities of those power indices. Therefore, the main purpose of this study was to evaluate retest reliabilities of currently available new generation power indices of WAT.

**METHOD**:Twenty-one well-trained male athletes (peak power [PP]: 14.7±1.3 W·kg<sup>-1</sup>) performed a series of WAT trials on Monark 894E Peak Bike cycle-ergometer (Monark, Vansbro, Sweden) –using 10% of their body mass as the testing load– separated by minimum of 48 hours. These trials were continued until the PP difference between consecutive two trials were less than 5%. Test and retest reliabilities were analyzed according to intra-class correlation coefficient (ICC) and coefficient of

<sup>&</sup>lt;sup>1</sup> Dokuz Eylül University School of Sport Sciences and Technology

<sup>&</sup>lt;sup>1</sup> Ege University School of Physical Education and Sports

variation (CV).

**RESULTS**:According to main results, retest reliabilities -ICC [95%CI] and CV [95%CI]- of new generation power indices were estimated as 0.35 [-0.74-0.74] and 31.6% [23.2%-49.3%] for t@PP, 0.93 [0.79-0.97] and 1.39% [1.05%-2.04%] for  $v_{\text{max}}$ , 0.69 [-0.35-0.93] and 11.0% [7.41%-20.9%] for P@ $v_{\text{max}}$ , 0.40 [-1.6-0.86] and 25.3% [16.5%-54.0%] for t@ $v_{\text{max}}$ , 0.93 [0.82-0.97] and 7.61% [5.74%-11.3%] for Dec@P, 0.98 [0.95-0.99] and 2.35% [1.79%-3.46%] for Etot. Moreover, peak power (0.98 [0.94-0.99] and 2.00% [1.52%-2.93%]), average power (0.98 [0.93-0.99] and 1.43% [1.08%-2.09%]) and power drop 0.94 [0.84-0.97] and 6.95% [5.24%-10.3%] and relative power drop (0.86 [0.65-0.95] and 5.64% [4.26%-8.34%]) indices had high reliability levels.

**CONCLUSION**:In conclusion, retest reliabilities of traditional power indices of WAT were found to be in the ICC range of 0.86-0.98 as accepted in the literature and CV range of %1.43-%6.95. Although reliability levels of some new generation power indices were high for  $v_{\text{max}}$ , Dec@P,  $\text{E}_{\text{tot}}$  and moderate for  $\text{P@}v_{\text{max}}$ , unexpectedly, reliability of time-related new power indices such as  $\text{t@}v_{\text{max}}$  and t@PP were found to be quiet low.

Keywords: Decline, Peak Bike, Rpm, Time, Velocity

### PP. 374 EFFECTS OF DIFFERENT EXERCISE PROGRAMS ON LACTATE RESPONSE

Elvin Onarıcı Güngör<sup>1</sup>, İlker Yılmaz <sup>1</sup>, Sanli Sadi Kurdak <sup>2</sup>, Hayri Ertan <sup>1</sup>, Abdullah Ruhi Soylu <sup>3</sup>

### **Abstract**

**Purpose**: An improvement in maximum oxygen uptake, exercise economy, lactate/ventilatory threshold parameters will result in an improvement of exercise performance. The effects of different exercise intensities on lactate responses and maximal oxygen consumption is not determined in inactive young males in previous studies.

The goal of this study was to examine the changes of lactate responses and maximal oxygen consumption after sub-threshold and supra-threshold exercise program.

**Methods**: Twenty four  $(21 \pm 7 \text{ years})$  male volunteered participate in the study. All subjects were tested before and after exercise programs. Each subject underwent three exercise trials on a cycle ergometer. First, maximal progressive exercise test (pedaling rate=70 rpm; incremental work load 20 W.dk<sup>-1</sup>) was performed for to establish the individual VO<sub>2maks</sub> and ventilatory threshold (VT) and constant load cycle rides. After maximal test subjects performed sub threshold (%80 VT) and supra threshold ( $\Delta$ 80%) constant load tests. Blood samples were taken every two minutes. Trainings were performed on a cycle ergometer four times per week for 30 min at sub-threshold (%80 VT) for 12 male and at supra-threshold ( $\Delta$ 80%) for 12 other male.

**Results:** Lactate accumulation after the sub threshold and supra threshold exercise programs was statistically different (P<0.05). The time to onset of blood lactate accumulation had increased after 6 weeks supra threshold exercise.

Performance time was more after the two exercise programs (P<0.05). But subjects attended supra threshold exercise terminated exercise 2 minute later. Sub threshold exercise elicited % 12,6 increase in maximum oxygen uptake (P<0.05). Supra threshold exercise elicited % 16,2 increase in maximum oxygen uptake (P<0.05).

**Conclussion:** Performance time was more after two exercise program in this study. This result is supported with previous research.

According to previous research the time to onset of blood lactate accumulation had increased after high intensity training . It can be said that supra threshold trainings more effective than sub threshold

<sup>&</sup>lt;sup>1</sup> Anadolu University Faculty of Sport Sciences

<sup>&</sup>lt;sup>2</sup> Çukurova University School of Physical Education and Sports

<sup>&</sup>lt;sup>3</sup> Hacettepe University Faculty of Medicine Department of Biophysics

trainings for the onset of blood lactate accumulation.

Keywords: Lactate, Anaerobic Threshold, Maximum Oxygen Uptake

# PP. 380 A COMPARISON OF MOTORIC AND ANTHROPOMETRIC CHARACTERISTICS OF BASKETBALL PLAYERS AND SWIMMERS

Barış Baydemir<sup>1</sup>, Hüseyin Özden Yurdakul<sup>2</sup>, Can Özgider<sup>3</sup>, Bahar Yılmaz<sup>2</sup>

### **Abstract**

**Purpose:** The aim of this research was to examine and compare the anthropometric and and motoric characteristics of of basketball players and swimmers.

**Method:** There were 26 male swimmers and 30 basketball players from local sports clubs in Çanakkele participated in this study. Height, weight, BMI, sit and reach, standing long jump, flamingo balance, sit-up, push-up, 30 meter speed and vertical jump tests were performed.

Data were analyzed by SPSS 20.0 Statistical Package Program for Windows. Mean, standard deviations were calculated.

**Findings:** According to findings; mean height of the swimmers was  $1,47\pm0,07$  and for the basketball players  $1,51\pm0,06$  m. Mean weight was  $42,61\pm7,13$  kg for the swimmers and  $47,80\pm10,60$  kg for basketball players. Mean BMI was  $19,32\pm2,03$  kg/m2 for the swimmers and  $20,72\pm3,45$  kg/m2 for the basketball players. Mean sit and reach test result was  $23,00\pm5,57$  cm for the swimmers and  $26,00\pm5,77$  cm for the basketball players. Mean standing long jump result was  $1,44\pm0,13$  m for the swimmer and  $1,52\pm0,14$  m for the basketball players. Mean flamingo balance test result was  $2,61\pm1,60$  for the swimmers and  $2,03\pm1,62$  for the basketball players. Mean sit-up test result was  $19,50\pm2,80$  for the swimmers and  $19,00\pm2,21$  for the basketball players. Mean push-up test result was  $19,84\pm3,47$  for the swimmers and  $19,43\pm2,58$  for the basketball players.

Mean 30 meter speed test result was  $6,08\pm0,34$  s for the swimmers and  $5,61\pm0,42$  sn for the basketball players. Mean vertical test result of the swimmers was  $22,03\pm3,98$  cm and  $27,20\pm4,96$  cm for the basketball players.

**Results:** As a result; there were similarities between basketball players and swimmers in terms of mean height. On the other hand, mean weight and BMI of the basketball players was higher than swimmers. Moreover, there were similarities in both group in terms of flamingo balance test, sit-up and push-up mean scores. However, baksetball players had higher scores on 30 meters speed test and vertical jump scores.

Keywords: Swimming, Basketball

# PP. 381 A COMPARISON OF MOTORIC CHARACTERISTICS OF MALE BASKETBALL AND SOCCER PLAYERS IN ÇANAKKALE

 $\underline{\text{Can \"Ozgider}}^1$ , Hüseyin  $\underline{\text{Ozden Yurdakul}}^2$ , Barış Baydemir  $\underline{^3}$ , Ferda Evci  $\underline{^2}$ 

### Abstract

Purpose: The purpose of this study to compare the motoric characteristics of male basketball and

<sup>&</sup>lt;sup>1</sup> Celal Bayar University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Çanakkale Onsekiz Mart University School of Physical Education and Sports

<sup>&</sup>lt;sup>3</sup> Middle East Technical University Department of Physical Education and Sports

<sup>&</sup>lt;sup>1</sup> Middle East Technical University Department of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Çanakkale Onsekiz Mart University School of Physical Education and Sports

<sup>&</sup>lt;sup>3</sup> Celal Bayar University School of Physical Education and Sports

soccer players in Çanakkale.

**Method**: There were 47 participants aged (between 11 to 12) in this research. 30 of them were from Tarım Spor Basketball Club and Gelibolu Rumeli Spor Basketbal Club. 17 of them were from Dardanel Spor Football Club.

Motoric characteristics of the participants were measured (30 meter speed test, push-up test, sit-up test, vertical jump test, standings long jump test, flamingo balance test, height and weight measurement).

Data were analyzed by SPSS 21.0 Statistical Package Program for Windows. Mean, minimum, maximum and standard deviations were calculated.

**Findings**: Results of the height measurement for the soccer players were 1.44±.06 m. On the other hand 1.51±.06 m for the basketball players. Weight measurements of the soccer players were 37.47±6.44 kg and for the basketball players it was 47.80±10.60 kg. Moreover; sit and reach test reults of the soccer players were 25.11±6.18 cm and for the basketball players it was 26.00±5.78 cm. Results of the standing long jump test were 1.42±.14 m for the soccer players and 1.52±.14 m for the basketball players. Flamingo Balance test results were 1.71±1.31 for the soccer players and 2.03±1.63 for the basketball players. Sit-up test results were 19.76±3.03 for the soccer players and 19.00±2.21 for the basketball players. Push-up test results were 20.18±4.30 for the soccer players and 19.43±2.58 for the basketball players. 30 meter speed test results 6.16±.34 s. for the soccer players and 5.62±.43 s. for the basketball players. Vertical jump test results were 23.00±7.04 cm for the soccer players and 27.20±4.96 cm for the basketball players.

**Results**: Findings indicated that there were differences between soccer and basketball players in terms of their motoric characteristics.

Keywords: Soccer, Basketball, Motoric

# PP. 383 INVESTIGATION OF THE RELATIONSHIP BETWEEN AGILITY, BODY COMPOSITION AND RAST FOR FOOTBALL PLAYERS WITHIN THE AGE GROUP OF 15-17 YEARS

Özgür Erikoğlu  $^1$  , <u>Gamze Erikoğlu Örer</u> , Emin Süel  $^1$  , Murat Erdoğdu  $^3$  , Mehmet Murat Örer  $^4$ 

### **Abstract**

**OBJECTIVE:** This study aims to investigate the relationship between agility, body composition and RAST tests of young, male football players and compare the fatigue values between groups.

**METHOD:** The study group consisted of 10 male football players in the age group of 15-17 and 10 male volunteer groups who do not sport in the age group of 15-17. Weight and height measurements of both groups were taken and then the Running-based Anaerobik Sprint Test (RAST) and Illionis agility tests were applied, respectively. Descriptive statistics (Means- Standard deviation) of all variables were conducted and then Pearson correlation coefficient was used to determine the relationship between agility test scores, RAST and anthropometric variables. T-test was used to compare two groups. SPSS 18.0 statistical program was used for data and p=0.05 significancy level was used.

**FINDINGS:** The relationships between anthropometric variables and agility in both groups were found insignificant (p>0.05); however, the relationship between the Running-based Anaerobik Sprint Test (RAST) and anthropometric variables was found significant (p<0.05). At the end of the agility test applied following the RAST test, fatigue levels were compared and a difference was found between sportsmen and control group (p<0.05).

**CONCLUSION:** It was found that the anthropometric variables are not decisive in Illinois agility test; however, they could be a decisive factor in tests which require speed. Fatigue values of the sportsmen

<sup>&</sup>lt;sup>1</sup> Aksaray University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Yıldırım Beyazıt University Faculty of Health Sciences Department of Sport Sciences

<sup>&</sup>lt;sup>3</sup> Necmettin Erbakan University Faculty of Tourism Recreation Management

<sup>&</sup>lt;sup>4</sup> TED Ankara College Private High School

group were found lower compared to the control group and the study group concluded the test at better level.

**Keywords: Rast, Agility, Football** 

# PP. 384 EFFECTS OF SPRINT INTERVAL VERSUS CONTINUOUS ENDURANCE TRAINING ON PHYSIOLOGICAL AND METABOLIC ADAPTATIONS IN YOUNG HEALTHY ADULTS

### Gülbin Rudarlı Nalçakan<sup>1</sup>

### **Abstract**

**Objective:** As lack of time is a commonly cited reason for physical inactivity, the apparent timeefficient aspect of sprint interval training (SIT) has significant implications for an exercise form. It has been recently reported that SIT modality deems successful to decrease subcutaneous fat tissue, especially in abdominal fat and total body weight, to improve blood lipid and lipoproteins, aerobic performance and skeletal muscle oxidative capacity, post-exercise fat oxidation and energy consumption, and peak power and mean power output. Approximately 15 to 20% of total energy provision is supplied from oxidative metabolism during a single 30-s Wingate all-out cycling, ATP provision is derived from oxidative metabolism with increasing level, if the exercise bouts are extend. It seems that SIT induces the same physiological and metabolic adaptations as traditional continuous endurance training (CET) because of workloads and fluctuations in oxygen intake during exercise. Although currently available literature have focused on fitness basic effects of all-out sprint interval modality, there is lack of experimental study evaluating SIT effects versus CET based on fitness, general health and safety aspects together. Therefore, aim of this study was to compare the effects of SIT and CET on some anthropometric, aerobic, anaerobic performance indices, mechanical gross efficiency and blood lipids, inflammation, skeletal muscle damages and myocardial cell injury in healthy young males.

**Method:** Fifteen recreationally active male volunteers (age, 21.7±2.2 years; body mass index (BMI), 25.0±2.1 kg.m<sup>-2</sup>; percentage of body fat (BF%), 16.2±3.2%; VO<sub>2</sub>max, 40.3±5.0 ml.min<sup>-1</sup>.kg<sup>-1</sup>) were divided into two groups according to initial VO<sub>2max</sub> levels. Training programs were conducted 3 times per week for 7 weeks. SIT program consisted of 4-6 Wingate anaerobic sprints with a 4.5 min recovery, while CET consisted of 30-50 min cycling with 60% VO<sub>2max</sub>. Biochemical (lipid profile, inflammation, myocardial and skeletal muscle damage markers), anthropometric (body mass, BMI, BF, waist and hip circumferences) and fitness assessments (max VO<sub>2</sub> test, Wingate all-out test, 30-min constant loading submaximal test for gross efficiency) were performed both pre and post-interventions. **Results:** There were significant improvements in VO<sub>2max</sub> (8.7%, 7.0%), anaerobic power (9.6%, 8.9%) and capacity (3.7%, 3.9%), VO<sub>2</sub> utilize during the submaximal workout (12.8%, 18.3%) and significant decreases in body fat (5.7%, 7.3%) and in waist circumference (3.9%, 3.3%) after the intervention for both CET and SIT. There was significantly greater in gross efficiency measured only in CET (18.4%). There was no difference on lipid profile (LDL, HDL, VLDL, TC, TG), serum levels of inflammatory (CRP, WBC), myocardial cell injury (cTnI and CK-MB) and skeletal muscle damage (CK, ALT, AST) markers after any training period.

**Conclusion:** The study results agree with the effectiveness of 30-s all-out training program with a reduced time commitment to anthropometric, aerobic and anaerobic adaptations and eliminate doubts about its safe model.

Keywords: Gross Efficiency, Inflammation, Lipids, Muscle Damage, VO2Max, Wingate Test

<sup>&</sup>lt;sup>1</sup> Ege University School of Physical Education and Sports

## PP. 394 THE COMPARISON OF SOME ANTHROPOMETRIC AND PHYSICAL FEATURES OF 12-13 AGE GROUP ELITE AND BEGINNER SKIERS

Vicdan Tetik  $^1$  , <u>Erkan Çetinkaya</u>  $^2$  , Ali Erdem Ciğerci  $^3$ 

- <sup>1</sup> Süleyman Demirel University Department of Sport Sciences
- <sup>2</sup> Adnan Menderes University School of Physical Education and Sports

### Abstract

AIM: In this study it was aimed to compare the anthropometric features, body fat percentage, leg – back strength, hand grip strength and flexibility measurements of the elite and beginner skiers. The sample of study consisted of totally 12-13 age group 30 athletes; 15 elite (height average 153,0±044 cm, weight average 48,70±5,13 kg), 15 beginner (height average 153,3±,044 cm, weight average 45,93±4,27) skiers.

METHOD: In this study, anthropometric features as well as leg-back strength, hand grip strength and flexibility were measured. The measuring tape was used for length and circumference, Skinfold caliper was used for subcutaneous fat, Takkei dynamometer was used for leg and back strength, hand grip dynamometer was used for hand grip strength, sit and reach test was used for flexibility measurements. SPSS 16.0 package program was also used for statistical analysis. Data were analysed in "Independent T Test" to compare two independent groups and the significance level was accepted as p<0.05.

FINDINGS: According to the findings, there were no significant differences in weight and height measurements between elite and beginner skiers. There were significant differences between triceps values among subcutaneous fat measurements; chest, flexiondabiceps, extansiondabiceps, forearm, thigh values among circumference measurements; leg and back strength values, hand grip left and right values, sit and reach flexibility values (p<0,05). Besides, there were no significant differences between trunk, upper arm, forearm, arm, thigh, calf values among length measurements; back, biceps, petoral, suprailiac, abdomen, thigh values among subcutaneous fat measurements; shoulder, abdomen, buttock, wrist, knee, calf, ankle values among circumference measurements.

CONCLUSION: As a conclusion, it was understood that the values of elite skiers in thigh among circumference, leg-back strength, hand grip right and left strength, flexibility measurements were statistically higher than beginner skiers.

Keywords: Ski, Anthropometry, Leg And Back Strength, Hand Grip Strength, Flexibility

# PP. 399 THE IMPACT OF CIRCADIAN RHYTHM ON SOME PHYSICAL AND PHYSIOLOGICAL PARAMETERS IN ELITE MALE TAEKWONDO ATHLETES

 $\underline{\mathsf{Emek}}\, \underline{\mathsf{Can}}^1$  , Emine Kutlay  $^1$  , Mehmet Zeki Özkol  $^1$  , Caner Çetinkaya  $^2$ 

### Abstract

**Aim:** Circadian rhythm refers to psychological and physiological variations that occur in 24-hour period, and it might affect Taekwondo contests' physical and physiological characteristics during the day, during the contest or in workouts. This study tries to gain an insight into the impacts of circadian rhythm, which refers to the biological rhythm for 1 day, on some physical and physiological parameters in elite male taekwondo athletes.

**Method:** 9 elite male taekwondo athletes (age:  $19,22\pm1,9$  years, height:  $176,9\pm3,9$  cm, body weight:  $66,9\pm11,9$  kg) participated in this articipated in thisdakika volümü nedir (kaçtır) ve bu değer maksimalde istirata koşullarına göre kaç kat artar? study.

Procedures: Resting heart rate  $[RHR_{(bpm)}]$  was measured while the athletes were resting in sitting

<sup>&</sup>lt;sup>3</sup> Kastamonu University Rectorate

<sup>&</sup>lt;sup>1</sup> Ege University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Dokuz Eylül University Faculty of Medicine

position for 20 mins (Polar RS400) the lowest value was recorded. Intra-aural resting body temperature [RBT<sub>(°C)</sub>]: Five measurement were done from right ear (Braun Thermoscan IRT4520), lowest and highest measurement results were left unrecorded, the mean of the remaining 3 measurements were recorded. Counter movement jump [CMJ(cm)]: Two jump were performed (Bosco Contact Mat; New Test 1000) and the highest values were recorded. Peak [CMJ-PP(w)] and mean  $[CMJ-MP_{(w)}]$  anaerobic powers were identified by using the Johnson & Bahamonde (1996) equation and CMJ scores. Effect Level of Paldeung Technique [PTEL(bar)]: Every athlete's targeted height and distance to kicking target were identified. Electronic body protector (LaJUST Electronic Impact Detection & Scoring System) was clothed around the water bag (Adler). 2 paldeung-technique performed with the dominant foot and the highest bar value was recorded. Wingate Anaerobic power test (WAnT): Their peak powers  $[WAnT-PP_{(W)}]$ , mean powers  $[WAnT-MP_{(W)}]$ , peak powers corresponding to athletes' body weights  $[WAnT-PP_{(w/kg)}]$ , and mean power  $[WAnT-MP_{(w/kg)}]$  were measured on different days with 48-hour intervals (only one timeframe for each day) in five different periods of time (I= 08:30-10:30, II= 11:30-13:30, III= 14:30-16:30, IV= 17:30-19:30, V= 20:30-22:30) by taking into account the contest time. In addition, the athletes' cronotypical structure and sleep quality were identified by applying Horne-Ostberg's Morningness and Eveningness Questionnaire and also Epworth Sleepiness Scale.

<u>Statistical analysis:</u> Whether the data was appropriate for the normal distribution was investigated through Shapiro-Wilks. ANOVA with repeated measures was employed as a statistical method and once a significant difference was obtained, LSD *post-hoc* analysis was carried out in order to figure out which periods of time lead to this difference. Pearson correlation analysis was used in determining the correlation between the variables. The significance value was set as p<0.05 in statistical analyses.

**Results:** Significant difference was observed in RHR<sub>(bpm)</sub> (p=0.001), RBT<sub>(°C)</sub> (p=0.001), CMJ<sub>(cm)</sub> (p=0.014), CMJ-PP<sub>(w)</sub> (p=0.014), CMJ-MP<sub>(w)</sub> (p=0.014), PTEL<sub>(bar)</sub> (p=0.001), WAnT-MP<sub>(w)</sub> (p=0.008), WAnT-MP<sub>(w)</sub> (p=0.009). Significant difference was not observed in WAnT-PP<sub>(w)</sub> (p=0.638). and WAnT-PP<sub>(w/kg)</sub> (p=0.634). According to LSD post-hoc analysis, the highest difference was seen in RHR<sub>(bpm)</sub> between III. (68.0±2,5) and I. (59.6±3), RBT<sub>(°C)</sub> IV. (36.5±0.1) and I. (35.8±0.1), CMJ<sub>(cm)</sub> IV. (46.1±3.4) and I. (42.2±6.7), CMJ-PP<sub>(w)</sub> IV. (4973±577.9) and I. (4659.9±544.5) CMJ-MP<sub>(w)</sub> IV. (1971.7±290.6) and I. (1806.5±283.2), PTEL<sub>(bar)</sub> IV. (155.5±22.8) and I. (121±19.6), WAnT-MP<sub>(w)</sub> III. (564±66.9) and I. (547.1±64), WAnT-MP<sub>(w/kg)</sub> III. (8.59±0.66) and I. (8.3±0.63) time periods. According to Pearson correlation analysis, negative correlation (r=0.795/p=0.024) was found in IV. timeframe between RBT and RHR; positive correlation (r=0.776/p=0.014) was found in I. timeframe between RBT and CMJ-PP<sub>(w)</sub>; positive correlation (r=0.762/p=0.017) was found in I. timeframe between RBT ile CMJ-MP<sub>(w)</sub>. No correlation was found between RBT and other parameters.

**Conclusion:** Body temperature is the fundamental variable of circadian rhythm, and it is cited in the literature that many performance constituents follow the body temperature changes. This study, in which the impact of circadian rhythm on some physical and physiological parameters was assessed by taking into account taekwondo athletes' contest timeframe, suggests that significant circadian variations were observed in five different times of the day in RBT, RHR, CMJ, CMJ-PP<sub>(W)</sub>, CMJ-MP<sub>(W)</sub>, WAnT-MP<sub>(W/kg)</sub>, WAnT-MP<sub>(W)</sub> and PTEL (p<0.05).

It makes us think that, depending on the impact of circadian rhythm, the variations in some physical and physiological parameters might offer a better performance with the combined techniques including jumping and paldeung between 1 and 3 seconds interval in the afternoon and evening hours. Therefore, cronotypical characteristics and the effects of circadian rhythm should be taken into consideration to boost the performance in contests and workouts. For a brighter result, these points should be taken into account in the workout hours and programs of elite athletes.

Keywords: Circadian Rhythm, Taekwondo, Wingate Anaerobic Power Test

# PP. 410 RESEARCH FOR THE LEVELS OF CHILDREN'S SKILLS, WHOSE BODY MASS INDEXES ARE ELIGIBLE FOR THE SPORT OF TENNIS (EXAMPLE OF KONYA)

Ensar Köktaş<sup>1</sup>, Selma Karacan <sup>2</sup>

### **Abstract**

**Purpose**: The purpose of this study is to create test batteries to be able to determine levels of ability of the children, regarding the sport of tennis, whose body mass indexes are eligible for doing sport.

**Method**: The subject matters of the study include a total of 1017 students, 500 girls and 517 boys, from three different primary schools in Konya, their socio-economical status being different from each other. Students who participated in the study avarage age, height and body weight are determined. While 20 meter sprint test, hexagonal test and standing long jump test were practiced in order to obtain motoric features, throwing ball against wall test (1 meter), carrying ball on racket test, reaction test and throwing ball against wall test (2 meter) were applied. Arithmetic mean (X), the standard deviation (Sd) and %1, 10, 25 slice results were determined.

Finding: The percentage distribution of all the tests according to age groups and sex in this study was calculated and then evaluated in four sections as "low, normal, high and very high". In throwing ball against wall test (1 meter), Cronbach Alpha coefficient was determined as 0,918. While normal value (between %25-50) for the girls was obtained to be 14-21 unit/min, very high value (over %75) was obtained as 32-51 unit/min, but for the boys, normal value was obtained to be 15-22 unit/min, while very high value (over %75) for boys was obtained as 33-50 unit/min. In carrying ball on racket test, Cronbach Alpha coefficient was determined as 0,763. The normal value for both sexes were determined as 2-3 unit/min, and very high value was 3-4 unit/min. In the reaction tests, the points of both sexes were the same. Accordingly, normal values were found to be 6-7 unit, where very high values were 9-10 unit. Cronbach Alpha coefficient of the reaction test was determined as 0,754. For throwing ball against wall test (2 meter), normal value for girls was 18-22 unit/min, while very high value was 26/35 unit/min. But for the boys, normal value was 19-22 unit/min, while very high value was 28-40 unit/ min. Cronbach Alpha coefficient of the test was determined as 0,810.

**Result**: As a result, it is revealed that the tests held in this study in order to determine the ability levels of children at the ages of 6-7 are eligible and reliable for the first period of ability selection.

**Keywords: Child, Tennis, Ability Selection** 

## PP. 411 EFFECTS OF STANCE FOOT ON STATIC BALANCE PERFORMANCE AMONG JUNIOR LEVEL SOCCER PLAYERS

### Gunay Yıldızer<sup>1</sup>

### **Abstract**

In order to enhance performance of soccer players, a lot of study conducted. Studies conducted on soccer context focused on elite and mature population and there is insufficient number of studies conducted on young and junior level soccer players. However, the vast number of participants in the soccer area is younger populations and questions about these populations are need to be answered. Balance is one of the most important component for walking reaching, running, bending, etc. From the perspective of locomotion, balance is a base for other movement patterns. There are three main information sources of balance which are vestibular system, visual system and proprioceptive system. These three different information sources work integratedly with different levels of activation depending on the movement patterns. Soccer consist of different movement patterns and most of them are different types of running, kicking and bending. It has been show that soccer players show

<sup>&</sup>lt;sup>1</sup> Karabük University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Selçuk University School of Physical Education and Sports

<sup>&</sup>lt;sup>1</sup> Anadolu University Faculty of Sport Sciences

different performance while they stand on different foot.on different tasks. Therefore it is important to investigate performance differences caused by preferred stance foot and effect of visual information on balance performance among junior level soccer players. Finally, the purpose of this study was to understand the effectiveness of stance foot on balance performance among junior level soccer players.

**MATERIALS&METHODS:** For the sake of purpose of the study, 27 soccer players ( $M_{AGE} = 147.19 \text{ month}$ ,  $SD_{AGE} = 3.93$ ,  $M_{EXPERIENCE} = 31.33 \text{ month}$ ,  $SD_{EXPERIENCE} = 17.07$ ) who are at the same age and at the same football club were participated in study. Soccer players were following the same soccer program almost over 2 years. In order to evaluate balance performances force platform (Custom made, Bertec, OH) at 100Hz was used. Participants performed 4 different balance task; stance on dominant foot, stance on dominant foot with closed eyes, stance with non-dominant foot, stance with non-dominant foot with closed eyes. The method have already been used by previous studies and making it possible to compare results with previous results. For the static balance the mean distances from the center of platform were taken into statistical analyses. The data taken from Anterio-Posterior (AP) distance and Medio-Lateral distance were taken into statistical analyses. 2x2 Repeated Measures Anova Conducted to understand effectiveness of dominant and non-dominant foot and 2 different visual conditions on balance performance.

**RESULTS & DISCUSSION:** For the Medio-Lateral direction results of Repeated Anova revealed non-significant main effects of visual conditions and feet condition, p > .05. Moreover, there were no interaction between these two independent variables, p > .05. The results were the same for the Anterio-Posterior direction and there were no main effect and interaction of independent variables, p > .05.

It has been shown that soccer players are better than non-athletes when performing one legged static balance task. Comparing to non- athletes; the differences between dominant and non-dominant foot were not significant in soccer players. However; non-athletes show significantly higher sway distance, sway frequency and velocity comparing to dominant and non-dominant foot. Therefore; as it is emphasized before the soccer training improves the control of non-dominant foot, due to constant kicking action.

Keywords: Soccer, Balance, Children

# PP. 415 EXAMINATION OF THE RELATIONSHIP BETWEEN SPRINT SPEED, VERTICAL JUMP AND STRENGTH PARAMETERS OF FEMALE SOCCER PLAYERS

Kemal Göral<sup>1</sup>, Şenol Göral<sup>2</sup>

### **Abstract**

**Aim:** The aim of this study is to examine the relationship between sprint speed, vertical jump and strength parameters of female soccer players.

**Method:** 18 female soccer players were voluntarily participated in this study. In this study, age, height, weight, sprint speed, vertical jump and body strength values were determined by measuring instruments. The data obtained in this study was recorded in SPSS program. In order to examine the relationship between parameters, pearson correlation test was applied. Significance level was accepted as p<0.05.

**Findings:** Female soccer players' sprint speed values at the avarage age of  $20.44\pm1.65$  were determined as  $5.65\pm0.30$  sn, vertical jump values  $31.3\pm2.61$  cm, back strength values  $77.97\pm4.78$  kg, leg strength values  $90.74\pm2.36$  kg, right hand grip strength values  $25.21\pm1.96$  kg and left hand grip strength values  $24.69\pm1.83$  kg. Significant relationships were found between back strength and vertical jump values (p<0.05); right hand grip strength and left hand grip strength values (p<0.01).

**Result:** Consequently, it was found that average values of female soccer players were similar to studies in literature. Strength feature one of the most fundamental determinants of performance is

<sup>&</sup>lt;sup>1</sup> Muğla Sıtkı Koçman University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Gazi University School of Physical Education and Sports

effective on vertical jump. Therefore, it is thought that in the training sessions required importance should be given to strength practices.

Keywords: Female, Soccer, Speed, Veritcal Jump, Strength

# PP. 417 ANALYSIS OF PHYSICAL AND PHYSIOLOGICAL FEATURES OF WEIGHT LIFTERS AT AGE 15 – 17

Abdüsselam Turgut<sup>1</sup>, Erkan Demirkan <sup>2</sup>, Çağla Çatal <sup>3</sup>

- <sup>1</sup> Kırıkkale University School of Physical Education and Sports
- <sup>2</sup> Hitit University School of Physical Education and Sports
- <sup>3</sup> Amasya University Institute of Social Sciences

### **Abstract**

**Aim**: Analyzing physical and physiological features of a group of male weight lifters with ages between 15 and 17 is aimed on this research.

Method: 26 sportsmen, age average of 15.96±0.87, height average of 167.63±9.73 cm, body weight average of 70.35±20.46 kg, body fat percentage of 15.93±6.20% and felexibilities of 29.19± 6.28 are attended to this research when they are on national team training camp. For measuring height and weight of sportsmen, Seca 714 measurement equipment is used. Hand dynamometer(Takei A-5001) is used for hand grip strength measurement. Back and Leg dynamometer (Takei A-5002 model) is used for back and leg strength measurement. Body fat percentages are calculated with Lohman formula and measurements, done with Holtain caliper, from 3 different area(tricesps, subscapular ve abdominal). Maximum weights of 'snatch' and 'clean and jerk' of participants are weights that are recorded in Turkey National Championship and, total weigths, lifted by participants, are summation of values 'snatch' and 'clean and jerk' weights. Additionally, vertical jumping values are identified according to Sargent Jump Test batary and, then anaerobic power values are calculated by using Lewis Nomogram. Finally, body weight without fat is calculated by substraction of kilogram value, that is converted value of body fat percentage calculated by Lohman Formula from body weight in kilograms. Analysis of obtained datas is processed in Windows SPSS 17.0 packet statistics programme. Arithmetic average and standard deviation of measurement results are calculated. Furthermore, correlation analysis is applied for obtaining relations between each others(in data domain). Statistical signifiance value is p>0.05.

Findings: Ratios of maximum 'snatch' (97.00±17.52 kg), maximum 'clean and jerk' (118.35±21.20 kg) and, total lifted weight(215.35±38.52 kg) between anaerobic power are r=0.87, r=0.85 ve r=0.86 (p>0.05) in order, these ratios shows meaningful high level statictical relation in positive direction. Ratios of maximum 'snatch', maximum 'clean and jerk' and, total lifted weight between body weight without fat  $(58.09\pm11.75 \text{ kg})$  are r = 0.82, r = 0.79 ve r = 0.81 (p>0.05) in order, these ratios shows meaningful high level statictical relation in positive direction. Ratios of maximum 'snatch', maximum 'clean and jerk' and, total lifted weight between back power are r=0,86, r=0,79 ve r=0,83 (p>0.05) in order, these ratios shows meaningful high level statictical relation in positive direction. Ratios of maximum 'snatch', maximum 'clean and jerk' and, total lifted weight between leg power are r = 0.77, r=0,73 ve r=0,75 (p>0.05) in order, these ratios shows meaningful high level statictical relation in positive direction. Ratios of maximum 'snatch', maximum 'clean and jerk' and, total lifted weight between right hand grip power( $46.02\pm8.39$ ) are r=0.82, r=0.81 ve r=0.82 (p>0.05) in order, these ratios shows meaningful high level statictical relation in positive direction. Ratios of maximum 'snatch', maximum 'clean and jerk' and, total lifted weight between left hand grip power(43.31±7.15) are r=0.82, r=0.76 ve r=0.79 (p>0.05) in order, these ratios shows meaningful high level statictical relation in positive direction. Ratios of maximum 'snatch', maximum 'clean and jerk' and, total lifted weight between body fat percentage are r=0.82, r=0.76 ve r=0.79 (p>0.05) in order, these ratios shows meaningful middle level statictical relation in positive direction. Ratios of maximum 'snatch', maximum 'clean and jerk' and, total lifted weight between flexibility don't show a meaningful statistical relation (as given order; r=0.12, r=0.08 and r=-0.08).

**Results:** Back and leg powers, right and left hand grip powers, body weight without fat, anaerobic power levels of weight lifters are thougt as a positive effect in lifting acts as 'snatch' and 'clean and jerk'. However, flexibility isn't thought as an effect in lifting performances. As an addition, not only given features of weight lifters, also,right technique is thought as a positive effect in lifting acts as 'snatch' and 'clean and jerk'.

Keywords: Weight Lifting, Physical and Physiological Features, Fat Free Mass

# PP. 419 THE EFFECT OF 8-WEEK BALANCE AND COORDINATION TRAINING ON THE PERFORMANCE OF DEAF JUDOKAS

 $\underline{\ddot{O}}$ nder Karakoç $^1$ , Mehmet Fatih Karahüseyinoğlu  $^2$ 

### Abstract

Aim: This study is an experimental study which was determined the effect of 8-week balance and coordination training to the performance on deaf judokas, Methods: The sample of study include totally 30 people who are in Deaf Handicapped Judo National Team (10 boys,5 girls) and Ali Süzer Deaf Handicap Sports Club Deaf Handicapped Judo Team (10 boys,5 girls). The experimental group mean age as  $20.27 \pm 4.95$ , also in the control group as  $20.87 \pm 7.94$  were found. Data of subjects were obtained in the pre-test and post-test. Health Board Report was taken and then athlete licence was got for the deaf handicapped judokas. Ethics committee approval was taken. The experimental group which was entirely formed voluntarily and chosen by randomly, a 90-minute Judo training program was applied for 3 days a week. At the beginning of this training, groups separated after the warm-up, balance and coordination training which was consisted of 10 different exercises and lasted for 25 minutes was applied to the experimental group. Control group also continued only Judo training. The total duration of training is same both the experimental and control groups. In statistical analysis, SPSS 16.0 package program was used. Statistical results were evaluated at the 95% confidence interval and p < 0.05 significance levels. For significance Paired Samples T-Test was applied because groups' pre-test and post-test measurements showed a normal and homogeneous distribution. Findings: In the result of the study 8-week balance and coordination trainings, experimental group's flexed arm suspension, 30 seconds sit-ups, 30 seconds pushups, grip strength, leg strength, body fat percentage (%), maxVO2, from dynamic values stability index, total body standard deviation, open eye, from static balance values; right foot average and front-to-back speed values were found significantly (p<0.05). **Results:** So it can be said that regular balance and coordination training improves the performance of deaf handicapped judokas, and dynamic stability trainings affect the performance more than static balance trainings.

Keywords: Deaf Handicapped, Judo, Training, Balance, Coordination, Performance

# PP. 420 WEEKLY DIFFERENT NUMBER OF SPRINT TRAINING'S EFFECTS ON 13-14 YEAR OLD MEN BASKETBALL PLAYERS' JUMPING, SPEED, AEROBIC ENDURANCE AND AGILITY PERFORMANCES

Barış Koyuncuoğlu $^1$ , <br/> Eylem Çelik $^1$ , Utku Alemdaroğlu $^1$ 

### Abstract

Purpose: The purpose of this study was to investigate weekly different number of six-week sprint training's effects on 13-14 year old men basketball players' jumping, speed, aerobic endurance and

<sup>&</sup>lt;sup>1</sup> Gaziantep University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Firat University School of Physical Education and Sports

<sup>&</sup>lt;sup>1</sup> Pamukkale University School of Sport Sciences and Technology

agility performances.

Method: At this purpose 40 basketball players participated in the study. Four groups of 10 people were grouped according to their 20 m sprint pre-test degrees. Group 1 (13.5  $\pm$ 0.53 year, 171.80  $\pm$  9.22 cm, 55.40 $\pm$ 10.46kg) has made weekly 3 spirnt and 3 basketball training, group 2 (13.7 $\pm$ 0.48 year, 160.03 $\pm$ 10.80 cm,55.06 $\pm$ 14.21 kg) has made weekly 2 sprint and 3 basketball training, Group 3 (13.7 $\pm$ 0.48 year,163.16 $\pm$ 10.72 cm, 57.04 $\pm$ 14.89 kg) has made weekly 1 sprint and 3 basketball training and Group 4 (13.7 $\pm$ 0.48 year, 170.88 $\pm$ 9.75cm, 58.14 $\pm$ 12.53 kg) has made only 3 days a week basketball training.

Athletes were performed to 20 meter sprint, standing long jump, 20-meter shuttle run agility test and t-test at the beginning and at the end of 6 weeks. The datas were evaluated by one-way ANOVA analysis. The level of significance was taken as 0.05.

Findings: According to the post test measurement values, there was a significant difference was found only in the standing long jump between Group 1 and Group 4 (p<0,05). According to the difference between pre-test and post-tests average values ANOVA analysis revealed that, there were significant differences among with sprint, agility and standing long jump development values except from 20 meter shuttle-run test. According to post-hoc analysis there were significant differences between group 1 and all other groups and group 2 and group 4 in the standing long jump (p<0,05). In addition to that, there was no significant difference was found among all groups in shuttle run test's development values. There were a significant differences were found between group 1 and group 4, among group 2 with group 3 and group 4. According to post hoc analysis there was a significant difference was found in agility development values only between group 1 and group 3 and group 4 (p<0,05).

Result: As a result of this study, athletes' agility, sprint, jumping parameters are developed by basketball tarining in conjuction with the second and third days of sprint trainings. Only one day of the sprint training has been found to be insufficient. There have been identified that sprint training does not cause the development of aerobic endurance. In the light of these results, it's recommended that this age level coaches should be practiced sprint training 2 days a week.

**Keywords: Sprint, Basketball** 

## PP. 421 CHANGES OF HEART RATE VALUES DURING DIFFERENT PERFORMANCE AND EFFECTS OF THIS CHANGES ON PERFORMANCE

Gökhan Deliceoglu<sup>1</sup>, Beyza Simsek <sup>1</sup>

### **Abstract**

**Aim:** Aim of the study is to investigate the changes of heart rate values between different performances and the effects of these changes on performance.

**Method:** 12 amateur soccer players ( $X_{age}$ =24,10±1,89years, training age=9,74±4,88 years, height X=178,79±4,87 cm, body weigh=80,80±9,30 kg, and percentage of body fat=11,36±3,93 percentage) participated to the study.

20\*10 m. repeated sprint and 30 sec Wingate bicycle ergometertests are applied as different performance parameters. heart rate values are recorded during the tests by Polar Team<sup>2</sup> · SPSS 17.0 packet program is used for descriptive statistics.

**Results:** It is seen that mean of the heart rate during repeated sprint test is  $173,48\pm8,16$  beats, maximum heart rate according to their ages of soccer players= $195.83\pm1,89$  beats, and percentage values of maximum heart rate is  $88,4\pm0,4\%$  beats.

When repeated sprint test durations analysed, it is found that total sprint time of 20\*10 m is  $42,28\pm1,37$  sec. and fastest total sprint time which is obtained according to fastest sprint time is  $40,08\pm,19$  sec. On the other hand, when it is mentioned about drop time index which is obtained from the differences between total sprint time and fastest total sprint time is =  $1,05\pm0,03$  sec. and heart rate values, it seen that a decrese 90% in the sprint performance.

<sup>&</sup>lt;sup>1</sup> Kırıkkale University School of Physical Education and Sports

Percentage of heart rate value during every 10 m. running showed that, heart rate values during repeated sprint test begin from 60% of maximum heart rate and increase towards to the 95% of maximum heart rate linearly. Especially after first 5 sprint values, it seen a increment close to steady state condition.

According to Wingate bcycle ergometer test results, when the percentage value belongs to maximum heart rate at every 5 sec is analysed, it is seen that, peak power value is reached the highest first 5 sec. At this time it is obtained 69% heart rate value and continoued to 93% linearly at every 5 sec. Despite sudden decrease in performance, percentage of heart rate values increase like steady state condition after 20 sec

**Conclusion:** High heart rate values during performance does not effect the sprint and anaerobic power of soccer players.

Keywords: Repeated Sprint, Heart Rate, Wingate Bicycle Ergometer

## PP. 423 EXAMINATION OF GAME DYNAMICS DIVERISITIES BETWEEN FIRST DIVISION MEN VOLLEYBALL TEAMS

Fatih Uzuner <sup>2</sup>, Evrim Ünver <sup>1</sup>, Sükrü Alpan Cinemre <sup>2</sup>

### **Abstract**

**Purpose**: The purpose of this study is to investigate some game dynamics of top four volleyball men teams in 2013-2014 season in the Turkish first division.

Method: High intensity movements and some game dynamics were recorded by monitoring matches, which were played by these teams with each other. Spike services, block jumps, fake jumps, passes with jump, dives and short sprints were recorded as high intensity movements during matches. Set times, set results, shortest and longest rally times were also recorded as game dynamics. These parameters were recorded for both teams during the game. The game videos of these four teams were obtained from Turkish volleyball federation archives. The game videos were monitored by using vlc dvd video player program with using a chronometer. Videos were monitored twice. At first, monitoring high intensity movements during matches had been recorded. At the next step monitoring game dynamics during the game were recorded.

**Results**: At the end of this study 285,57 mean high intensity movements have been seen during games of four teams which played with each other. This result is similar with literature, which is recorded 250-300 mean high intensity movements per game (Sheppard et al., 2009; Stojanovic, 2002).

Studies show that 45 rallies are playing during a volleyball match. 65 percent of these rallies are playing in 4 to 10 seconds. In general, rallies are playing in 5,6 to 39,6 seconds according to literature (Hayrinen et al., 2011; Mroczec et al., 2014). In this study the results show that rallies are playing in 31,15 seconds. The shortest rally time in top of Turkish first division is 7,03 seconds mean. 32,48 rallies are recorded of these four top teams in this study.

Hayrinen et al (2011) mentioned that in elite volleyball games load-rest rates are 1:1,6-1:3,8. In this study the load- rest rate was found 1:4,95.

Conclusion: When comparing the results of this study with the results in literature, it can be seen that the level of Turkish volleyball teams are negatively different according to the results in literature. These results shows us that the main diversity between Turkish teams and the results according to literature is in load-rest rates which, gives opinion about training level of Turkish Men Volleyball teams.

Keywords: Volleyball, Load, Rest, Rally

<sup>&</sup>lt;sup>1</sup> Hacettepe University Institute of Health Sciences

<sup>&</sup>lt;sup>2</sup> Hacettepe University Faculty of Sport Sciences

# PP. 432 THE EFFECT OF PLYOMETRIC TARAINING ON BALANCE AND SOCCERSPECIFIC OF AGED 11-12 CHILDREN

Faruk Akçınar<sup>1</sup>, Cengiz Arslan<sup>2</sup>, Abdullah Güllü<sup>1</sup>, Cemil Çolak<sup>3</sup>, Serpil Akçınar<sup>1</sup>

### **Abstract**

**Purpose:** In this research, it was aimed to find out the effect of pliometric trainings on balance and skills that are specific to soccer.

Method: The participants of this study were 38 healthy, 11 and 12-year-old male football players took place in this study voluntarily. Participant subjects were chosen among the sportsmen that are continuing their soccer trainings with "Grassroots" Activities of Turkish Football Federation. Tests on speed, agility, anaerobic power, balance, dribbling and pass tests were applied as pre-test to the sportsmen taking part in this study. During the following week, in addition to their three day footbal training, the experimental group was given plyometric works for eight weeks along and twice a week. The control group was never given any other additional work but their continuing soccer trainings. The post test evaluation was applied to both groups named experimental and control. The quantitative results that were attained after the study have been summarized with average, standard deviation or frequency (f) and percentage (%). The t-test was applied to the dependent groups in order to determine the importance of differences between pre-test and post-test variables.

**Findings:** According to the comparisons of pre-test and post-test that were applied to the experimental group which took part in the study, a significant difference in favor of right foot was ascertained durig the measurement of 30m speed, İllionis agility, İllionis dribbling, Johanson fast pass, wingate, dynamic balance tests (p<0,05). After applying the pre-test and post test measurements to the experimental and control groups that participated in this study, a statistically meaningful difference was ascertained in favour of experiment group (p<0,05). As there were no meaningful differences fort he advantage of left foot within the study caused us to think that participant sportsmen in this study are dominantly right-footers.

**Conclusion:** Consequently; it was clearly seen that pliometric training had positive effects on not only performance, but also on skills that are special to soccer and balance. According to these findings, pliometric training should be included in regular soccer training programs for children aged between 11 and 12. The fallacy that the pliometric trainings solely contribute to the condition training needs to be given up and pliometric trainings should be applied to all the practices at all levels of skills.

Keywords: Soccer, Plyometric, Balance, Skill

# PP. 442 THE EFFECTS OF POSTURAL CONTROL AND BALANCE QUALITIES ON TECHNICAL SKILLS AND MOVEMENT PROFILES IN SOCCER SPECIFIC SMALL-SIDED GAMES

Cağlar Edis <sup>1</sup>, Faik Vural <sup>2</sup>, Hikmet Vurgun <sup>3</sup>, Tuncay Varol <sup>4</sup>, Serkan Özgür <sup>4</sup>

### **Abstract**

**Objective:** Small-sided games (SSG) have become an important part for training and studies due to the fact that they reflect the cross sectional parts of the football matches. In recent literature, it is

<sup>&</sup>lt;sup>1</sup> İnönü University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Firat University, School of Physical Education and Sports

<sup>&</sup>lt;sup>3</sup> İnönü University, Department of Biostatistic

<sup>&</sup>lt;sup>1</sup> Celal Bayar University Institute of Health Sciences

<sup>&</sup>lt;sup>2</sup> Ege University School of Physical Education and Sports

<sup>&</sup>lt;sup>3</sup> Celal Bayar University School of Physical Education and Sports

<sup>&</sup>lt;sup>4</sup> Celal Bayar University Faculty of Medicine

shown in the physical and technical qualities that the level of balance of the football players plays a critical role under harsh conditions as well as increasing some technical qualities. However, a study in which balance level is associated with the physical and technical qualities in small-sided games has not been encountered yet. The aim of this study is to examine the relations between technical and physical parameters in small-sided games and balance ability of football players that train regularly. **Methods:** The research group of the study consisted of 16 young footballers (age:  $17,62\pm1,02$ , height: 176,25±0,072 cm, body weight: 67,67±13,27 kg, body mass index: 21,65±3,30 kg/m², body fat mass: 10,33±4,18 kg and soccer experience: 6,5±2,5). Postural control and balance tests were performed using Tekscan HR Mat pedobarography device. The global positioning system (GPS) was used to determining the motion profile and heart rate of the football players during the DAO, besides that technical parameters of the games were obtained as a result of the technical analysis. In the first phase, players' postural control tests were done as single and double-leg with 2 × 30-second duration and in the second phase firstly the 5 and 20-meter- sprint tests along with 1:1 games were done, and the following every other week 2:2 and 3:3 small-sided games were carried out. Results: As a result of the correlation analysis done between data as to variances, it was observed that dominant leg to right – left sway and average sway levels are significantly correlated with the players' velocities in small-sided games including 3:3 (r=-0.621 p<0.01, r=-0.512 p<0.05). Moreover; significant correlations between dominant leg and eyes-closed bipedal postural sway levels of the players and technical parameters such as tackle, shoot, pass, effective passes were found. Conclusion: Results indicate that right-to-left sway and balance sway velocities that are belong to the dominant leg and both leg balance and postural control variables, have correlated with football technical parameters. These findings highlight the need of testing, assessing and training for balance and postural control in youth football players to improve their performance in soccer match.

Keywords: Balance, Postural Control, Technical Skills, Movement Patterns, Small-Sided Games

## PP. 450 EVALUATION OF ELITE FEMALE VOLLEYBALL PLAYERS' HEART RATES AND BLOOD PRESSURE VALUES ACCORDING TO POSITIONS WHERE THEY PLAY

 $\underline{\text{Yeliz \"Ozveren}}^1$ , Bahtiyar Özçaldıran  $^1$ 

### **Abstract**

Introduction And Objective: Limited studies, researching that volleyball players' heart rates and their blood pressure levels according to their positions during competitions have been come across and therefore with our research, it's aimed that elit female voleyballers' heart rates and blood pressure levels should be compared according to their positions. Method: 28 female athletes, who regularly make training, have taken part volunteerly and their age average is 19.3±1.79. Athletes have been separated into the groups according to their position in which they play as blocker (n=8), corner player (n=8), setter (n=8) and libero (n=4). It's determined that athletes' training ages are respectively; for blockers 8±2.63, for corner players 9±1.26, for setters 9±2.32 and for liberos 9±1.61. Their blood pressure measurement and heart rates are taken before the match, in technical time-outs, between sets and after the match and the results are compared according to their positions. Results: The surveys are made for each athlete during 2 simulated sets and the athletes finished the competition in average for 120±11.6 shot/min. During the competition in average heart rate is saved; for setters as 112.3, for corner players as 119.6, for middle blockers as 121.3 and for liberos as 129.9 (shot/min). It's understood that during the competition the setters have the lowest heart rate, whereas liberos have the highest heart rate. The athletes' average systolic blood pressures are measured for setters as 122.2, for corner players 118.4, for middle blockers as 119.8 and for liberos as 123.6 (mm Hg). Their average diastolic blood pressure values are: for setters as 81.9, for corner players 74.14, for middle blockers as 76.7 and for liberos as 83.57 (mm Hg). Discussion and Conclusion: Whereas it appears that there's no difference between hitters (setter and outside hitter) for their heart rates and their blood pressure values, it's found out that there's significant differences as statistical between the players who play in different

<sup>&</sup>lt;sup>1</sup> Ege University School of Physical Education and Sports

positions (p<0.05). Starting from this, it is understood that according to positions that are played by elite female volleyball players, their training needs are different. Therefore, it can be said that trainers need to make special trainings for athletes for their positions and they also need to take account of training sciences' loading and resting principles while preparing their training programme.

Keywords: Volleyball, Heart Rate, Blood Pressure

### PP. 466 SWIMMING EXERCISE TO EXAMINE MUSCLE TISSUE OF RATS

 $\underline{\text{Murat Akyüz}}^1$ , Recep Soslu $^2$ , Murat Taş $^2$ , Öznur Akyüz $^3$ 

- <sup>1</sup> Bartın University School of Physical Education and Sports
- <sup>2</sup> Ağrı İbrahim Çeçen University School of Physical Education and Sports
- <sup>3</sup> Atatürk University School of Physical Education and Sports

### **Abstract**

Aim: Physical exercise on health many have beneficial effects in addition to being reactive oxygen species (ROS) and free radical formation, especially severe during exercise increases and oxidative damage, muscle, liver, blood and in other tissues occur evidence that are available. Free radicals are electrically charged molecules, electrons carry freely. Therefore, they try to steal an electron from the surrounding material. Thus, while a new radical radical neutralized and consecutive reactions occur consecutively. Based on this at different times of the swimming exercise was to evaluate the effect on muscle tissue.

METHODS: Male Wistar albino rats used in 32, 12 hours light, 12 hours dark and  $22 \pm 4$  °C adjusted to be at room temperature, an average weight of 160-200 g were grown until day 70-90. 10 days before the start of experimental work obtained from the research center into groups of four animals were placed in transparent plastic cages. Control rats, 15 min swim, 30 min and 60 min swim in the swimming group was formed four groups. Rats and 5 days a week for 6 weeks and then he floated the soleus muscle were analyzed by euthanasia.

RESULTS: In the analysis of the data obtained in this study, groups of SOD and MDA levels as a percentage of the difference is statistically significant results, but was not detected. GSH for the control group and 30 min value and 60 min swimming swimming group was found statistically significant results (p < 0.05).

CONCLUSIONS: health benefits of physical activity, although it is known that the effects of the exercise of reactive oxygen species (ROS) by increasing oxidative stress has been reported in many studies caused. In this study, the value of GSH, 30 min and 60 min swim in the swimming group to determine meaningful results depending on the duration and intensity of exercise on free radical formation and enzymatic antioxidant levels can be seen that the impact of the utmost importance. As a result, the exercises performed in a different time and in the formation and removal of free radicals in the enzymatic antioxidant system it is important that the suggested positive impact on sporting performance.

Keywords: Rat, Exercise, Free Radical, Swimming, Antioxidant

# PP. 476 EXAMINATION OF CHANGES OF FLEXIBILITY AND SOME PHYSICAL PARAMETERS AFTER 6 WEEKS EMS TRAINING

Eylem Çelik<sup>1</sup>, Fatma Başaran <sup>1</sup>, Özlem Kılıç <sup>1</sup>

### Abstract

EMS corresponds to electrical muscle stimulation..During classical trainings ,brain sends electraical

<sup>&</sup>lt;sup>1</sup> Pamukkale University School of Sport Science and Technology

signals to enable muscle activitation... Muscles and joints without using any weight, without the slightest installed, work more intense and longer than conventional methods (Speicher et al. 2008). There is an increase in EMS work in health area..Up to this, EMS has become a new training method for athletes. The aim of this study is to investigate the effects of 6 weeks EMG training on flexibility and some physical parameters on 25 years and older women. 15 sedantary women who lives in Denizli participated in the study voluntarily. (  $32,67 \pm 4,56$  yrs,  $164,2 \pm 6,40$  cm,  $69,05\pm 12,89$  kg). Participants participated full body EMS trainings twice a week. Before starting EMS training, subjects get dressed totally wet special outwear with special pads inside to ensure electrical transmission which were designed to run 9 main muscle. Electrical signals were sent to these pads to activate the muscles . (MihaBodytec, Germany).EMS muscle development trainings composed of 3 parts; muscle developpment, metabolism and resting, each lasted 25minutes All participants body analysis, body circumference and flexbility measurements were recorded at the beginning and end of the study. T-test analysis results showed that there is a significant difference in body fat percentage, body fat mass, body mass, flexibility, circumference of arm, leg, waist and hip. (significance level was at 0.05). Based on the results it is concluded that ,longer and more complex EMS trainings can perform tol increase performance more.

**Keywords: Elektrical Muscle Stimulation, EMS** 

# PP. 484 EXAMINING THE INFLUENCE OF THE PERCEPTUAL MOTOR DEVELOPMENT PROGRAM ON BALANCE AND FASTNESS IN 5-YEAR OLD PRESCHOOL CHILDREN

 $\underline{\mathrm{Kadir}\,\mathrm{Koyuncuo\check{g}lu}^1}$ , Uğur Şentürk $^1$ , Hacı Ahmet Taşpınar $^1$ , Tuba Akif  $^1$ 

### **Abstract**

**Aim:** Preschool is a period when the most positive and lasting contributions could be made to the skill of movement. This period covers the stages of development which could guide all the life. It is known that appropriate training programs could accelerate the development of a child in these sensitive phases of age. The aim of this study, thus, is to determine the influence of the perceptional motor development program on balance and fastness in 5-year old preschool children.

**Method:** A total of 36 children, including 16 girls and 20 boys who were five years old and attending preschool educational institutions, participated in the study. The program of playing and movement activities was applied to the children for 40 minutes a day, 2 days a week and for eight weeks in total. Pretest and posttest differences between the groups were examined by the independent samples t-test. In this research, the pretest-posttest application model was used for the experimental group. Children's motor performances were measured by the tests of balance on one foot, fastness, catching, standing broad jump and sprinting. Descriptive statistics of all the data obtained in the data analysis were calculated by the SPSS-15 software package.

**Findings:** Children participating in the survey length averages/=  $113,68 \pm$  is 19,92, girls ' is (/=  $117,1 \pm 5.93$ ), male children (/=  $111, 24 \pm 25,59$ ) longer than has been observed. Weight averages/=  $22,26 \pm 4.25$  is, girls ' (/=  $23.30 \pm 5.40$ ), boys (/=  $21,52 \pm 4.25$ ) are heavier than have been observed. Children participating in the survey as shown in the last measurement the last length measurements (/= first with length measurements  $4.78 \pm 119,7$  (/=  $113,68 \pm 19,92$ ) have been observed to increase in line with the refrontolo among children by standing long jump preliminary test averages/=  $88,77 \pm 13,65$  last test averages is observed as 12,56/=  $94,36 \pm$ . Preliminary test with the last test is a positive increase in between. Preliminary test and the final test in the measurements, the girls (/=  $85,26 \pm 12,82$ ;/=  $94,66 \pm 11.62$ ) boys (/=  $91,28 \pm 13,97$ ;/=  $94,14 \pm 13,47$ ) according to their better performance have been identified. the research involved children.

**Results:** It was concluded in the end of the research that the girls and boys who attended the 8-week playing and movement activities showed positive development in all variables based on their pretest and posttest motor performance values. It was found in the pretest and posttest measurements that girls

<sup>&</sup>lt;sup>1</sup> Çanakkale Onsekiz Mart University School of Physical Education and Sports

performed better than boys in the balance on one foot (seconds)  $(13.4 \pm 4.35 \text{ and } 16.78 \pm 4.29 \text{ versus } 12.66 \pm 3.66 \text{ and } 16.52 \pm 2.9)$ , fastness (20 m running)  $(5.92 \pm 0.68 \text{ and } 5.63 \pm 0.49 \text{ versus } 5.98 \pm 1.11 \text{ and } 5.95 \pm 0.70)$ , ball-catching  $(22.38 \pm 4.92 \text{ and } 24.19 \pm 4.68 \text{ versus } 20.93 \pm 6.22 \text{ and } 23.06 \pm 5.79)$  and long-jumping  $(85.26 \pm 12.82 \text{ and } 94.66 \pm 11.62 \text{ versus } 91.28 \pm 13.97 \text{ and } 94.14 \pm 13.47)$ .

Keywords: Preschool, Playing and Movement Activities, Motor Performance, Balance, Fastness

## PP. 485 COMPARISON OF MEN AND WOMEN VOLLEYBALL PLAYERS' FOREARM PASS KINEMATICALLY

 $\underline{\mathsf{Ahmet}\;\mathsf{Alptekin}}^1$ , Özlem Kılıç $^1$ , Eylem Çelik  $^1$ 

### **Abstract**

The aim of this study was to analyse the mechanical differences of the 3rd regional League men and women players' forearm pass. Six women players (age 20,70±0,50 years,height 1,78±0,005m weight 66,75±6,45kg) and seven men players (age 21,70±0,50 years,height 1,82±0,0 m,weight 84±6,45kg)participated in the study. The subjects were repeatedly thrown ball from 9 meters and 3.2 meters hight in the middle. Amongst the thrown balls , three successful forearm passes were analyzed. Three high speed cameras (Basler A602f-HDR) were used and three dimension image was taken. The angles of the elbow, knee and shoulder joints, the trunk angle in vertical axis, locatian changes of the centre of gravity, the ball's speed and angle were analysed in the image analyser by using the SIMI programme. Mann Whitney U test was used for statistical analysis. There was no significant differences bewtween men and women players evaluated parameters (p>0.05).

Keywords: Kinematik Analiz, voleybol, hareket Analizi, manşet Pas

# PP. 491 A COMPARISON OF THE BODY COMPOSITION PARAMETRES OF TURKISH AND FOREIGN NATIONAL JUDOISTS

Menderes Kabadayı <sup>1</sup>, Özgür Bostancı <sup>1</sup>, Deniz Özge Yüceloğlu Keskin <sup>1</sup>, Ceyhun Birinci <sup>1</sup>, <u>Alperen</u> Erkin <sup>1</sup>, Ali Kerim Yılmaz <sup>1</sup>, Bahtınur Taşcı <sup>1</sup>

### **Abstract**

AIM::This study was conducted in order to compare the body composition values of Turkish and foreign male national judoists.

METHOD: A total of 22 subjects, 11 Turkish and 11 foreign (from 4 different countries), participated in this study. Bioelectrical Empedance Analysis was used in detecting the body compositions of all judoists and all measurements were conducted using Jawon Gaia 359 plus. Age, height, weight, body fat weight, body mass index, basal metabolism rate and total body water of all subjects were measured respectively. Arithmetic mean, standard deviation, t test and Mann Whitney –U test were used for statistical analysis.

FINDINGS: The measurements conducted revealed that the mean age (year) was  $22.09 \pm 2.95$ ; that mean height (cm)  $178.05 \pm 9.56$  and that mean weight (kg) was  $91.20 \pm 18.22$  for Turkish judoists. The mean age (year) of foreign judoists was  $25.09 \pm 4.52$  while their height (cm) was  $179.47 \pm 10.22$  in average. They had an average weight (kg) of  $92.81 \pm 20.72$ .

The analysis conducted showed that Turkish judoists had a higher body fat weight compared with that of foreign judoists and that this difference was not statistically significant (p>0.05). It was found that total body waters of Turkish and foreign judoists were same. There was no statistically significant difference between Turkish and foreign judoists with regard to body mass index, Basal Metabolism

<sup>&</sup>lt;sup>1</sup> Pamukkale University School of Sport Sciences and Technology

<sup>&</sup>lt;sup>1</sup> Ondokuz Mayıs University Yaşar Doğu Faculty of Sport Sciences

rate and total energy consumption (p>0.05).

CONCLUSION: The comparison of body composition paremetres of Turkish and foreign judoists revealed similar results. Turkish sportsmen are likely to obtain better results provided that they gain game experience in the light of accurate nutrition and training programmes.

**Keywords: Judoists, Body Composition Parametres** 

## PP. 493 A COMPARISON OF THE BODY COMPOSITION PARAMETERS OF TURKISH AND FOREIGN FEMALE NATIONAL JUDOISTS

Menderes Kabadayı <sup>1</sup>, Deniz Özge Yüceloğlu Keskin <sup>1</sup>, Canan Asal Ulus <sup>1</sup>, Mustafa Özdal <sup>1</sup>, <u>Ali Kerim Yılmaz</u> <sup>1</sup>, Alperen Erkin <sup>1</sup>, Deniz Derebaşı <sup>1</sup>

#### Abstract

AIM: This study was conducted in order to compare the body composition values of Turkish and foreign female national judoists.

METHOD: A total of 26 female subjects, 14 Turkish and 12 foreign (from 4 different countries), participated in this study. Bioelectrical Empedance Analysis was used in detecting the body compositions of all judoists and all measurements were conducted using Jawon Gaia 359 plus. Age, height, weight, body fat weight, body mass index, basal metabolism rate, total energy consumption and total body water of all subjects were measured respectively. Arithmetic mean, standard deviation, t test and Mann Whitney –U test were used for statistical analysis.

FINDINGS: The measurements conducted revealed that the mean age (year) was  $22.0714 \pm 2.75860$ ; that mean height (cm)  $163.78 \pm 6.29296$  and that mean weight (kg) was  $68.5714 \pm 21.60440$  for Turkish female judoists. The mean age (year) of foreign judoists was  $22.500 \pm 3.55477$  while their height (cm) was  $165.7167 \pm 8.66538$  in average. They had an average weight (kg) of  $64.4917 \pm 10.78193$ .

The analysis conducted showed that Turkish judoists had a higher body fat weight compared with that of foreign judoists and that this difference was statistically significant (p>0.05). It was found that total body water of Turkish judoists was lowere than that of foreign judoists. However, this difference was not statistically significant (p>0.05). There was no statistically significant difference between Turkish and foreign judoists with regard to Basal Metabolism rates (p>0.05).

CONCLUSION: The comparison of body composition parameters of Turkish and foreign judoists revealed similar results. However, body fat rate of Turkish female judoists was higher than that of foreign judoists. Excess body fat could be affects the performance negatively. Better international results can be achieved provided that our sportsmen adopt a balanced diet before, during and after training sessions and matches.

**Keywords: Judoists, Body Composition Parametres** 

# PP. 495 INFLUENCE OF PRESCHOOL (AGES 5 AND 6) GYMNASTIC EXERCISES ON FLEXIBILITY, BALANCE AND COORDINATION

Kadir Koyuncuoğlu<sup>1</sup>, Uğur Şentürk<sup>1</sup>, Hasan Abanoz<sup>1</sup>, Kayhan Taşkıran<sup>1</sup>

### Abstract

**Aim:** The aim of this study was to examine the influence of gymnastic exercises on flexibility, balance and coordination characteristics in 5 or 6-year old children. A total of 54 children who were 5 or 6 years old and attending preschool education were selected randomly and included in the study.

**Method:** Participants' height, weight, flexibility, balance and coordination, and the flexibility of their lower extremity and lumbar extensors were measured by sit-and-reach eurofit test battery, the splits

<sup>&</sup>lt;sup>1</sup> Ondokuz Mayıs University Yaşar Doğu Faculty of Sport Sciences

<sup>&</sup>lt;sup>1</sup> Canakkale Onsekiz Mart University School of Physical Education and Sports

(hip flexibility) test, the bridging (spine flexibility) test, the flamingo balance test and coordination tests. Measurements were made using a chronometer (casio), a meter, a scale (felix) and a ruler. The pretest-posttest experimental method was used in the research.

**Findings:** In this study, a pretest and a posttest were applied to the experimental group. The SPSS software was used for statistical analysis, and the pretest and posttest difference was examined by the t-test. No significant difference was found between the heights and weights of the children in the end of the study. Significant differences were determined in the pretest versus posttest results of the sit-and-reach test  $(8,62\pm4,52 \text{ versus } 11,85\pm4,77)$ , the splits test  $(9,38\pm4,90 \text{ versus } 4,83\pm3,78)$ , the bridging test  $(49,40\pm17,43 \text{ versus } 43,72\pm15,65)$ , the flamingo balance test  $(15,29\pm6,43 \text{ versus } 21,25\pm9,22)$ , and the coordination test  $(16,20\pm2,68 \text{ versus } 12,55\pm2,64)$ . Test measurement results were given in the tables. Each test application was carried out twice, and the highest degrees, seconds and meters were taken.

**Results:** It was concluded that gymnastics have a significant influence on flexibility, balance and coordination.

Keywords: Gymnastics, Flexibility, Balance and Coordination

# PP. 500 EXAMINATION OF THE SPEED AND ENDURANCE PARAMETERS OF THE LOCAL AMATEUR LEAGUE AND SUPER AMATEUR LEAGUE FOOTBALL PLAYERS OF THE CITY OF CANAKKALE

Hasan Abanoz <sup>1</sup>, Kadir Koyuncuoğlu <sup>1</sup>, Hacı Ahmet Taşpınar <sup>1</sup>, Batuhan Irmak <sup>1</sup> Canakkale Onsekiz Mart University School of Physical Education and Sports

### **Abstract**

**Aim:** In this study, it is aimed to examine and compare some physical and physiological characteristics and endurance parameters of football players of Çanakkalespor which is one of the super amateur league teams and Bozcaadaspor which is one of Çanakkale regional amateur league teams by using appropriate test and measurement methods.

Method: The research group consists of 15 football players playing in regional amateur league team Bozcaadaspor and 15 football players playing in super amateur league team Çanakkalespor, a total of 30 football players. Height, body weight, sports age, 30 meters sprint and 20 meters shuttle run test measurements of the players were averaged and their standard deviations were obtained by teams. Height measurement of the players was carried out by stadiometer (Seca, Germany) which has 0,1 mm degree of accuracy and their body weight measurements were carried out by Fitnese AR 553 Body Analysis Weighing Machine. 10 minutes of warm-up time was given to the players before getting their speed and endurance test measurements. Tests were conducted on tiled floor. 2 times application right was given to each player for 30 meters sprint test and the best results were used for analysis. 30 meter sprint ratings were measured with electronic tool of the brand Telemetric stopwatch (Koltest 2010) that has 1/100 of a second accuracy. 20 meter shuttle run test was measured in accordance with the specified test standards (Siegler, 1980).

**Findings:** The findings obtained from the tests and measurements of the 30 football players from Bozcaadaspor (15) and Çanakkalespor (15) teams: While the mean age of Bozcaadaspor was  $24,4\pm0$ , the mean age of Çanakkalespor football team was found as  $26\pm1,41$  years. It was determined that the sport age of Bozcaadaspor football players was  $10,93\pm0,70$  years, and the sport age of Çanakkalespor football players was  $11,8\pm1,41$  years. While the average height of Bozcaadaspor football players was  $176,54\pm11,50$  cm, the average height of Çanakkalespor football players was found as  $177,34\pm12,35$  cm. The body weight of Bozcaadaspor football team's players was found as  $77,49\pm7,21$  kg and the body ody weight of Çanakkalespor football team's players was found as  $71,64\pm5,86$  kg. While the results of 30 meter sprint test of Bozcaadaspor football players were found as  $4,16\pm0,11$  sec and the results of 20 meter shuttle run test were found as  $97,66\pm2,82$  sec., the results of 30 meter sprint test of Çanakkalespor football players were found as  $4,16\pm0,11$  sec and the results of 20 meter shuttle run test were found as  $4,47\pm0,02$  sec. and the results of 20 meter shuttle run test were found as  $86,86\pm2,82$  sec.

Conclusion: When the results of 20 meter shuttle run test and 30 meter sprint test of Bozcaadaspor team players which compete in the regional amateur league are compared with the results of the super amateur team Çanakkalespor's players, it was identified that there was a significant difference. The detected difference showed parallelism with similar scientific studies when they are examined. According to the results of test and measurements, it was concluded that the speed and endurance performance of the football players playing in the regional amateur league which is one league higher then the super amateur league were better.

**Keywords: Speed, Endurance, Football** 

# PP. 503 ANALYZING ANTHROPOMETRIC AND MOTHORIC FEATURES OF 11-12 AGE GROUP FOOTBALL PLAYER CHILDREN AFTER 8 WEEKS TRAINING

Can Özgider<sup>1</sup>, Hüseyin Özden Yurdakul <sup>2</sup>, Barış Baydemir <sup>3</sup>, Enis Kaya <sup>2</sup>

#### Abstract

 ${f GOAL}$ : The goal of this research is Analyzing anthropometric and mothoric features of 11-12 Age Group Football player children after 8 weeks training.

**METHOD**: The research group of this study are 17 players who play at Dardanelspor Football School. The measurements of length, weight, vertical jump test, stable long jump, flamingo balance test, 30 seconds shuttle and push up test, sit-reach test, 3 steps jump test, 30 m. speed test of the students who attended research are performed. SPSS-20.0 statistics software is used for analysis of data. Average and standard deviation values comparing to another players of all collected data are calculated and difference between first and second test is considered and analyzed.

**FINDINGS**: The average length of research participants are confirmed as before  $1,44\pm0,06$  and after  $1,44\pm0,07$  cm. The average weight of research participants are confirmed as before  $37,47\pm6,44$  after  $37,58\pm6,35$  kg, flexibilities  $25,11\pm6,17$  after  $27,70\pm6,46$  cm, long jump averages before  $1,42\pm0,14$  after  $1,56\pm0,17$  cm, balance test averages before  $1,70\pm1,31$  later  $2,70\pm1,57$ , participants' shuttle test averages before  $19,76\pm3,03$  after  $20,76\pm2,63$ , push up test averages before  $20,17\pm4,30$  later  $20,76\pm3,25$ , speed test averages before  $6,15\pm0,34$  later  $5,64\pm0,37$  sec., vertical jump test averages before  $23,00\pm7,03$  sonrasi  $25,35\pm6,60$  cm, 3 steps jump test averages before  $4,22\pm0,42$  after  $4,59\pm0,35$ . **OUTCOME**: As outcome it is confirmed that, there are differences between the results of pre-test and final test of 11-12 year-old football player children after 8 weeks training.

**Keywords: Football** 

# PP. 516 RELATIONSHIP AMONG AGILITY, SPRINT, STRENGTH AND BALANCE IN ICE HOCKEY PLAYERS

 $\underline{\text{Arda \"Ozcelik}}^1$ , Atakan Yılmaz  $\frac{1}{2}$ , Aydan Aytar  $\frac{2}{2}$ , Mustafa Gülşen  $\frac{3}{2}$ , Ayşe Kin İşler  $\frac{4}{2}$ 

### Abstract

Purpose: The purpose of the present study was to determine the relationship among agility, sprint,

<sup>&</sup>lt;sup>1</sup> Middle East Technical University Department of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Çanakkale Onsekiz Mart University School of Physical Education and Sports

<sup>&</sup>lt;sup>3</sup> Celal Bayar University School of Physical Education and Sports

<sup>&</sup>lt;sup>1</sup> Başkent University Department of Sport Sciences

<sup>&</sup>lt;sup>2</sup> Başkent University Department of Physiotherapy and Rehabilitation

<sup>&</sup>lt;sup>3</sup> Başkent University Hospital Department of Physical Therapy and Rehabilitation

<sup>&</sup>lt;sup>4</sup> Hacettepe University Faculty of Sport Sciences Department of Exercise and Sports Sciences

strength and balance in ice hockey players.

**Methods:** A total of 27 ice hockey players (age:  $18.46 \pm 4.41$  years, height:  $175.96 \pm 9.34$  cm, body weight:  $71.19 \pm 12.76$  kg, fat:  $13.45 \pm 7.61$  %) who were playing in ice hockey clubs in Ankara participated in this study voluntarily. Participants' agility level was determined on-ice by using "The Agility S-Test" and sprint values were determined by on-ice 30 meters forward and 30 meters backward sprinting tests. Peak isokinetic knee extension and flexion strength of the participants were determined for both legs at two different speeds ( $60^{\circ}$ s-1 an  $180^{\circ}$ s-1). Finally balance of the participants was determined as static and dynamic balance.

**Results:**Pearson Product Moment Correlation analysis indicated significant correlation between on-ice agility and 30 meters forward (r=0.652; p=.000) and 30 meters backward sprint (r=0.768; p=.000). On the other hand no significant correlations were observed between agility and peak isokinetic knee extension and flexion strength and between agility and static and dynamic balance (p>0.05). Similarly when relation between sprint and isokinetic knee strength are taken into consideration, no significant correlations were found between 30 meters forward and backward sprint and peak isokinetic knee flexion and extension strength at  $60^{0}$ s<sup>-1</sup> and  $180^{0}$ s<sup>-1</sup> (p>0.05). Also no significant correlations were found between 30 meters forward and backward sprint and static and dynamic balance (p>0.05). Finally there was no significant correlation between peak isokinetic knee flexion and extension strength at  $60^{0}$ s<sup>-1</sup> and  $180^{0}$ s<sup>-1</sup> and static and dynamic balance(p>0.05).

**Conclusion:**As a conclusion on-ice agility and sprint values of ice hockey players were found to be were related with each other while no relationship were found among the rest of the parameters.

Keywords: Ice Hockey, Agility, Sprint, Strength, Balance

## PP. 527 THE EFFECT OF DIFFERENT LIQUIDS INTAKE DURING AEROBIC EXERCISE ON APPETITE REGULATING HORMONES IN OBESE WOMEN

 $\underline{\mathsf{Raif}\ \mathsf{Zileli}}^1$ , Önder Şemşek $^2$ , Mehmet Tosun $^3$ , Erdinç Serin $^4$ 

- <sup>1</sup> Bilecik Seyh Edebali University School of Health
- <sup>2</sup> Izzet Baysal University School of Physical Education and Sports
- <sup>3</sup> Abant İzzet Baysal University Faculty of Medicine Medical Biochemistry
- <sup>4</sup> İstanbul Education and Research Hospital Medical Biochemistry

### Abstract

**Introduction and aim:** Obesity is a chronic medical condition in which body fat accumulation may have an adverse effect on health, leading to reduced life expectancy and quality of life. The aim of this study was to examine the acute effect of different liquids consumed during aerobic exercise on appetite regulating hormones in overweight and obese women. Method: Fifteen female aged between 25-45 years old volunteered for this study, after a medical evaluation by physicians. Resting heart rate, arterial blood pressure, waist-hip ratio, BMI, body fat percentage, height, weight and personal information of subjects were taken at beginning. Subjects applying a standard diet participated in an exercise period at intensity of 75% of their maximal heart rate for 60 min per day and along 15 days to adjust for exercising then the main study was started. Subjects were divided into 3 groups for different liquid intake during exercise: kefir, mineral water and water. On the 1st and 2nd day blood samples were collected. Subsequently, the 3rd day, subjects exercised at an intensity of 75% of maximal heart rate for 75 minutes. At the beginning of exercise (0 min), at the end of exercise (75 min) and 20 min after exercise, blood samples were collected. Leptin, ghrelin, insulin, glucose levels were determined in blood samples. Each group was asked to consume 500 ml of either kefir, mineral water or water during exercise session. Data were analyzed in SPSS 17 Statistical Program and presented as mean and standard deviation. Intergroup differences were analyzed with the Kruskal-Wallis test and then the Mann-Whitney U test was used for post-hoc analysis. Within group differences were analyzed with the Friedman test and then the Wilcoxon Signed Rank test was used for post-hoc analysis. Findings: It was found that there was a statistically significant differences between kefir, mineral water and water

groups after exercise at 75 min. (p<0.05). The differences in acyl ghrelin level was significant between groups after exercise. **Discussion and Conclusion:** It was concluded that consuming kefir during aerobic type of exercise can decrease the acyl ghrelin level more than mineral water and water and therefore can lessen appetite after exercise.

Keywords: Obesity, Overweight, Aerobic Exercise, Appetite Regulating Hormones, Acylated Ghrelin, Leptin

# PP. 541 THE EXAMINING OF ACUTE CHANGES IN SOME MUSCLE DAMAGE AND INFLAMMATION MARKERS SUBSEQUENT TO FREE STYLE WRESTLING

 $\underline{\text{Muhammed Emin Kafkas}}^1$ , Celal Taşkıran  $^1$ , Armağan Şahin Kafkas  $^1$ , Gökmen Özen  $^1$ , Çağatay Taşkapan  $^1$ 

### Abstract

**Aim:** The purpose of this study to examine the acute changes on some muscle damage and inflammation markers after a simulated during one-day Free Style wrestling contests.

**Method:** Eleven elite male competitive wrestlers, (26.75±6.20 years, 76.45±11.50 kg, and 173.10±8.80 cm) that have competed for national teams, completed five matches according to the official Olympic wrestling tournament regulations. Blood sampling were performed before and after fifth match.

**Findings:** There were significant differences between the pre- and post-test of muscle damage markers Creatine Kinase (CK) and Lactate Dehydrogenase (LDH) in favor of post-test (p=.003, p=016). In terms of inflammatory markers analyzed Interleukin-6 (IL-6) concentration that were significant differ pre and post-test in favor of post-test (p=.003). Study findings showed increases of CK (%129), LDH (%34) some muscle damage and IL-6 (%769) inflammation markers between pre and post test in the Free Style wrestling contests.

Conclusion: Due to significant increases in CK and LDH values there might say to would expose acute muscle damage after wrestling tournament that continued during one-day. Also, because of increments IL-6 values showed that there would be acute inflammation risk. In the light of findings, we might say to would increase of both acute inflammation and injury risks caused by excessive physical stress.

Keywords: Wrestling, Creatine Kinase, Lactate Dehydrogenase, Interleukin

### PP. 554 THE EFFECT OF DIFFERENT AMBIENT TEMPERATURES ON MOTORIC FEATURES

 $\underline{\text{Ergün Cakır}}^1$ , Selami Yüksek  $^2$ , Bülent Asma  $^3$ , Erkal Arslanoğlu  $^1$ 

### Abstract

Aim: The aim of this study was to investigate the effect of different ambient temperatures on basic motoric features.

**Method:** Kafkas University, Sarikamis Physical Education and Sports School Students participated to study. 15 athletes with different branches at amateur level voluntarily participated. Flexibility, vertical jump, grip strength, leg strength, sprint speed, 20 meter shuttle run and coordination – agility tests were measured at five different ambient temperatures (22 ° C Humidity 34%, 10.5 ° C Humidity 34%,

<sup>&</sup>lt;sup>1</sup> İnönü University School of Physical Education and Sports

<sup>1</sup> Kafkas University Sarıkamış School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Karadeniz Technical University School of Physical Education and Sports

<sup>&</sup>lt;sup>3</sup> Yüzüncü Yıl University School of Physical Education and Sports

 $0\,^{\circ}$  C humidity 32%, -5.5  $^{\circ}$  C Humidity 32%, -11  $^{\circ}$  C Humidity 32%). Data analzed by busing SPSS 17 package programme. Age, height, resting heart rate, body weight and BMI values' mean, standard deviation, maximum and minimum values were calculated. Comparison of the data obtained in different ambient temperatures were investigated by using in the One Way analysis test at a significance level of 0.05 and 0.01. The Kolmogorov-Smirnov test was applied to determine the data is Normal distribution or not. Kruskal Wallis test from nonparametrik tests was used for not normal distribution data. Significant differences were detected in all the motoric values except anaerobic capacity (p <0.05).

**Findings:** In all measured parameters, there are marked changes according to cold environment when temperatures increase. There are significant differencess in all parameters except anaerobic capacity.

**Result:** In all sports activities in the hot environment, there are higher yields than cold environment temperatures and increases the performance of athtletes.

**Keywords: Temperatures, Performance, Motoric Features** 

# PP. 558 INVESTIGATING DIFFERENCES ON PHYSICAL AND PHYSIOLOGICAL PARAMETERS IN COMPETITIVE ATHLETICS BETWEEN THE AGE OF 14-16 YEARS

Gürcan Ünlü<sup>1</sup>, Damla Gönen <sup>1</sup>, Tuba Melekoğlu <sup>1</sup>

### **Abstract**

**Background:** The aim of this study was to investigate anthropometric variables (body mass index, somatotype and body fat percentage) and pyhsiological variables (hand grip strength, back strength, leg strength, standing long jump, 30 sec crunch test) in children aged 14-16 involved in athletics diciplines (sprints, middle/long distance running, throws, jumps) (AD) and not-involved in sports(NSP).

**Materials and methods**:58 adolescent male who involved in athletics diciplines (n=37, age 15,15  $\pm 0.94$  yr, body mass  $61.52 \pm 13$  kg, height  $172.46 \pm 8.40$  cm) and not-involved in sports (n=21, 15.47 + 0.68 age yr, body mass kg, height cm) took part in the study. AD group from junior national team were invited to participate in this study. The average training year of AD were  $4.19 \pm 1.11$  year and weekly training duration averaged  $5.11 \pm 0.91$  hours.

**Results**:The somatotype values for AD were 2,27-2,14-3,69 as balanced ectomorph and for NSP were 3,31-2,07-2,79 as mesomorph - endomorph. When comparing to the NSP, AD had higher strength values (p<0,05). But there is no significant differences in other anthropometric parameters (p>0,05). There were no statistically significant differences between strength parameters of throwers and jumpers. Leg strength was higher in throwers and jumpers than distance runners and sedanteries(p<0,05). When comparisons were made between sprinters and distance runners, the sprinters showed significantly higher values of back strength. Jumpers had greater standing long jump values  $(251,90\pm18,44 \text{ vs. } 217,00\pm16,12 \text{ cm})$  and hand grip strength with dominant hand than distance runners  $(49,20\pm5,42\text{vs. } 38,45\pm5,28)$ .

**Conclusion**: it could be said that throwers and jumpers greater strength values than distance runners and sedanteries. When the groups are compared in terms of somatotip features the ectomorphic score of distance runners was higher than other athletics.

Keywords: Athletics, Somatotype, Strength, Adolescents

<sup>&</sup>lt;sup>1</sup> Akdeniz University School of Physical Education and Sports

### PP. 561 THE EFFECT OF THE GYMNASTICS TRAINING ON GROWTH AND BIOMOTOR ABILITIES IN 4-6 YEARS OF AGE CHILDREN

İnci Kesilmiş<sup>1</sup>, Manolya Akın <sup>1</sup>

### Abstract

**Purpose:** The aim of this study was to investigate 12 weeks gymnastics training effect on growth and biomotor abilities in 4-6 years of age pre-school student. Mersin Sevgi Kindergarden students joined this study (n=136).

**Methods:** Physical and anthropometric characteristics and biomotor abilities were evaluated to investigate the effects of gymnastics training programs on preschool children. To evalute body fat persentage the Durning Womersday equation and for somatotype the Healt Carter equation were used. While evaluating flexibility, beighton criteria's cut-off point was taken as 5, to evaluate biomotor abilities; standing long jump, sargent jump (Jumpmeter), dynamic equilibrium (tecno body), reaction time (Digital-Type Discriminative Reaction Tester), motor skill (pheppletype stabilimeter), hand-eye coordination (coordination tester), test of attention were applied.

**Result:** While the effect of gymnastics on sitting height (p=0,003), weight (p=0,008), balance (p<0,001), balance measure equipment slalom test (p<0,001), standing long jump (p<0,001), sargent jump (p<0,001), motor abilities (p=0,043) and attention (p<0,001) were significant, the effect of gymnastics training on height, spam, percentage of body fat, somatotype, reaction time and coordination were not found significant. The relationship between hypermobility characteristic and gymnastics was significant (p=0,025).

**Conclusions:** Gymnastics training effects on 4-6 years of age pre-school children were significant in sitting height, weight, balance, hypermobility, standing long jump, sargent jump and motor abilities.

Keywords: Pre-School, Gymnastics, Biomotor Ability, Growth, Anthropometry

## PP. 562 HEMATOLOGICAL PARAMETERS OF MALE ATHLETES IN DIFFERENT SPORT BRANCHES BEFORE AND AFTER EXERCISE

### Gülsün Aydın<sup>1</sup>

### **Abstract**

**Aim of Study**: The purpose of this study was to research the differences of blood parameters of athletes in different branches, before and after exercise.

**Method**:Anadolu University professional soccer (n=8), volleyball (n=9), swimming (n=8) players, inactive people (n=7), a total of 32 male who are 17-24 years old, participated in this research voluntarily. The information was given to them and a permission paper was signed before the tests. A questionnaire was applied to the players and sedentary to take some information about their health, training information and personal information. The information was given to them as having breakfast, not drinking tea, coffee, milk, coke before the test, not eating something 2 hours before the test. A questionnaire was applied to men to take information about general knowledge, health and physical activity status of them. Electronic height and weight measurement instrument (Seca), anthropometric measurement set (Holtain) were used for the anthropometric tests. Açıkada formula was used to calculate the body fat percentage.

3 cc venial blood samples were taken before exercise and in 5 minutes after exercise by a doctor. Hematological parameters such as WBC, RBC, Hgb and Hct were measured with Counter (MD8) CBC machine. CPX-25 exercise protocol (25 watt/ 1 minute incremental) was used with bicycle ergometer (Ergoline 900). SPSS 12 was used for statistical analysis. Paired-t test was applied to demonstrate the differentiations between hematological parameters of players before and after exercise.

<sup>&</sup>lt;sup>1</sup> Mersin University School of Physical Education and Sports

<sup>&</sup>lt;sup>1</sup> Anadolu University Faculty of Sport Sciences

**Results and Conclusion**: As a result of the research Wmax (Watt) values of volleyball players are  $237.50\pm8.18$ , football players' are  $238.89\pm6.05$ , swimmers' are  $234.38\pm10.50$ , values of inactive people are  $185.00\pm5.35$ . The exercise duration of volleyball players is  $11.84\pm0.99$ , football players' is  $12.09\pm0.88$ , swimmers' is  $11.79\pm0.76$ , inactive people is  $9.82\pm0.75$ .

There is a significant difference between the volleyball players', football players' and swimmers' RBC, WBC, Hgb, Hct values before and after exercise. RBC, WBC, Hgb, Hct values of volleyball players, football players and swimmers before exercise increased after exercise. There is no difference between the RBC, WBC, Hct values of inactive people but there is a significant difference between Hgb values. In conclusion, these results suggest that maximal exercise loading have an acute increase in hematologic parameters but it is recommended that new researches should be done due to the differences of parameters as individual or exercise loadings.

Keywords: Hematological Parameters, Different Sport Branches, Inactive People

# PP. 567 INVESTIGATING OF EFFECTS OF DELAYED ONSET MUSCLE SORENESS, OCCURRING AFTER ECCENTRIC EXERCISE, ON SOME BIOCHEMICAL PARAMETERS AND SHOOTING ACCURACY IN BASKETBALL

Mert Kayhan<sup>1</sup>, Mehmet Acet <sup>1</sup>, Sayit Altıkat <sup>2</sup>

### **Abstract**

**Aim**: The aim of this study is to investigate basketball players', studying at School of Physical Education and Sports in Dumlupinar University in Kutahya, shooting accuracy and some biochemical changes occurring after eccentric exercise in delayed muscle damage.

**Method**:Total thirty-two basketball players participated in the study on voluntary basis. Basketball shooting accuracy test developed by Pojskic, Separovic, and Uzicanin in 2001 was used to get shooting accuracy of players in both previous exercise and in after exercise. Personal Information Form prepared by researcher to get personal information regarding the participants and Microsoft Excel 2010 were used to arrange the date and to make graphic. SPSS 21.0 for Windows package program was used to analyze the data. Firstly, normality test was performed to determine whether the data shows normal range or not. Repeated measure was used to analyze the data which shown normal range at the level of 0,05. After that Post- Hoc test was used as second level test for the differences having resulted as significant.

**Results**: While we have not found significant difference between test and control groups in terms of biochemical parameters before exercise (p>0,05), but in some parameters which the participant have (p<0,05). While there is also no significant difference as a result of analyzing in-group values of control group and test group (p>0,05), it has been found significant difference in some biochemical values obtained after analyze in test group (p>0,05). Finally, there is no significant difference neither in shooting accuracy, in between groups, nor in-group of test and control (p>0,05).

**Conclusion**:As a result, although delayed onset muscle soreness occurring after eccentric exercise effected negatively shot percentage in basketball players, there was no significant difference. However, basketball players will precisely complain about muscle soreness after playing intensively, contentious, controversial and playing teams with tight defense .We think that muscle soreness effects negatively shot performance in basketball games.

Keywords: Muscle Damage, Eccentric Exercise, Creatine Kinase, Basketball, Delayed Onset Muscle Soreness

<sup>&</sup>lt;sup>1</sup> Dumlupınar University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Dumlupınar University Faculty of Medicine

# PP. 574 RELATIONS AMONG THE PARAMETERS OF PALDEUNG TECHNIQUE EFFECT LEVEL, TROCHANTERIC HEIGHT, FOOT LENGTH AND ANAEROBIC POWER IN TAEKWONDO ATHLETES

Emek Can<sup>1</sup>, Emine Kutlay <sup>2</sup>, Mehmet Zeki Özkol <sup>2</sup>, Caner Çetinkaya <sup>3</sup>

### **Abstract**

**Aim:** This study aimed to examine the relations of Taekwondo-specific Paldeung technique's effect level (PTEL), Counter Movement Jump (CMJ) height and the peak and mean power obtained from this value, Wingate anaerobic power test (WAnT) parameters with trochanteric height and foot length. **Method:** This study is an experimental laboratory study that examined the effect of some physical and physiological parameters on taekwondo athletes. The participants of the study include 9 male elite taekwondo athletes who have competed as national team athletes before, have national or international awards in their own weight categories ( $age=19,22\pm1,92$  years,  $height=176,96\pm3,91$  cm, body  $weight=66,93\pm11,99$  kg, body fat ratio (BFR)= %  $6,98\pm1,75$ , fat-free mass (FFM)=  $62,08\pm9,72$  kg, body mass index (BMI)=  $21,32\pm3,21$  kg/m<sup>2</sup>).

### Practices:

Paldeung technique effect level [PTEL(bar)]: Distances from the target and the height of the target were determined for each athlete. The distance from the target was determined basing on the athletes' trochanteric height. Target height was specified with reference to the mid-point between the sternum and ilio spinal lines of the athletes. Electronic body protector (LaJUST Electronic Impact Detection & Scoring System) was robed around the kickstand (Adler kickstand). Athletes were made to perform 2 paldeung technique practices with their dominant feet (at 30-second intervals) and the highest bar was recorded.

Trochanteric height, foot length measurement and skinfold measurements: In the anthropometric measurements taken in order to determine the athletes' trochanteric height, foot length measurements (sliding caliper, Cescorf, Equipment BRA) and skinfold (skinfold caliper, Holtain Ltd., Wales, UK) measurement techniques and measurement sites were specified using the protocol defined by ISAK (International Society of Advancement of Kinanthropometry). Yuhazs (1974) formula was used for BFR measurements (6 areas, for males).

Counter movement jump  $[CMJ_{(cm)}]$ : 2 vertical jump were performed (Bosco Contact Mat; New Test 1000) and the highest value was recorded. Peak  $[CMJ-PP_{(W)}]$  and mean  $[CMJ-MP_{(W)}]$  anaerobic powers were calculated using CMJ heights and Johnson & Bahamonde (1996) formula.

Wingate anaerobic power test [WAnT]: Monark 894 E Peak Bike Cycle Ergometer (Monark, Sweden) was used for WAnT test. Values of peak power [WAnT-PP $_{(W)}$ ], mean power [WAnT-MP $_{(W)}$ ], the lowest power [WAnT-LP $_{(W)}$ ], peak power corresponding to the athletes' body weight [WAnT-PP $_{(W/kg)}$ ], mean power [WAnT-MP $_{(W/kg)}$ ], the lowest power [WAnT-LP $_{(W/kg)}$ ], fatigue index (%) ratio, power drop (%) ratio and power drop (W/s) were determined.

<u>Statistical analysis:</u> SPSS 13 (SPSS, Inc., Chicago, IL) statistics program was used for data analysis. The data were subjected to Shapiro-Wilks test for normal distribution. Pearson correlation analysis was used for the relations between the variables. The value of significance in statistical analyses was specified as p<0.05.

**Results:** Tackwondo athletes' mean PTEL values (157,44±21,94 bar), throcanteric height (89,43±1,88 cm), foot length (26,7±1,11 cm), CMJ values (47,67±4,98 cm), CMJ-PP values (5089,95±525,49 W), CMJ-MP values (2033,18±261,49 W), PP values in WAnT (870,38±131,69 W), MP values (567,94±70,32 W), LP values (356,7±42 W), fatigue index ratio (48,17±5,96 %), power drop ratio (58,39±6,81),power drop (17,12± 3,92 W/s) were calculated. As a result of the correlation analysis carried out, significant correlations were found between PTEL and body weight r=.880/p=.002, PTEL and BFR r=.800/p=.010, PTEL and FFM r=.888/p=.001, PTEL and height r=.714/p=.031, PTEL and

<sup>&</sup>lt;sup>1</sup> Ege University Institute of Health Sciences

<sup>&</sup>lt;sup>2</sup> Ege University School of Physical Education and Sports

<sup>&</sup>lt;sup>3</sup> Dokuz Evlül University Faculty of Medicine

BMI r=.825/p=.006, PTEL and foot length r=.701/p=.035, PTEL and CMJ r=-.700/p=.036, PTEL and WAnT(MP) r=.673/p=.047 respectively.

**Conclusion:** Paldeung technique is one of the most commonly used techniques in taekwondo competitions. In the present study, it was observed that paldeung technique effect level is in relation with some anthropometric and anaerobic parameters. For effective practices of the Paldeung technique, anaerobic and anthropometric features should be taken into account. Moreover, it is considered that these relations may provide trainers with new ideas in the selection and training of taekwondo athletes.

Keywords: Keywords: Paldeung Technique, Trochanteric Height, Foot Length , Anaerobic Power

# PP. 577 COMPARISON OF VISCERAL FAT AND BODY COMPOSITION MEASURED BY DUAL-ENERGY X-RAY ABSORPTIOMETRY BETWEEN YOUNG MALE ATHLETES AND NON-ATHLETES

 $\underline{\text{H\"{u}seyin Aslan}}^1$ , Ümid Karlı $^2$ , Alpay G\"{u}venç $^3$ , B\"{u}lent Işık  $^4$ , Abdussamet Batur  $^5$ , Caner Açıkada  $^6$ 

- <sup>1</sup> Selçuk University School of Physical Education and Sports
- <sup>2</sup> Abant İzzet Baysal University School of Physical Education and Sports
- <sup>3</sup> Akdeniz University School of Physical Education and Sports
- <sup>4</sup> Ministry of Health of Turkey Ambulance Service Chief of Medical Doctors of Konya Province
- <sup>5</sup> Yüzüncü Yıl University Dursun Odabaş Medical Center
- <sup>6</sup> Hacettepe University Faculty of Sport Sciences

### **Abstract**

**Objective:** The aims of this study were to assess level of visceral fat in relation to regular sport participation and to examine its relationship to subcutaneous fat and body composition measured by dual-energy x-ray absorptiometry (DEXA) in young male athletes and non-athletes.

**Methods:** One hundred one 17-to 21-year-old males (51 athletes and 50 non-athletes) voluntarily participated in this study. The athletes were soccer players who had been training regularly for at least five years. Anthropometric measurements including stature, body mass, skinfold thickness, circumference and width measurements were obtained from each subject. Fat mass, fat free mass (FFM) and body fat percentage (BF%) were measured by DEXA. Subcutaneous abdominal fat, preperitoneal abdominal fat and epigastric fat tissue were also determined in millimeters by using ultrasound imaging technique. The data were analyzed using independent samples Student t-test and Pearson's correlation coefficients were also calculated.

**Results:** Independent samples t-tests indicated that both BF% and fat mass were significantly lower (p < 0.05), and FFM was significantly higher (p < 0.01) in the athletic than in the non-athletic males. Furthermore, skinfold thicknesses from the nine sites, including subscapular, triceps, biceps, chest, abdominal, suprailiac-1, suprailiac-2, thigh and calf, subcutaneous abdominal fat and epigastric fat tissue of athletic males were significantly lower (p < 0.05) than those of non-athletic counterparts. Moreover, it was found that BF% was positively and significantly correlated with skinfold thicknesses, circumference and width measurements (p < 0.05). However, subcutaneous abdominal fat, preperitoneal abdominal fat and epigastric fat tissue were significantly related with BF% in only athletic males (p < 0.05).

**Conclusions:** In conclusion, these findings revealed that the relationship between visceral fatness and athletic performance may need to be examined further for future studies in which different athletic populations could be employed.

Keywords: DEXA, Ultrasound, Anthropometry, Subcutaneous Fat, Visceral Fat

## PP. 589 CORRELATION OF FUNCTIONAL MOVEMENT SCREEN SCORES ON SPRINT PERFORMANCE AND RELEVANCY OF INJURY HISTORY

Akif Yazıcı<sup>1</sup>, Alper Aşçı<sup>1</sup>

### **Abstract**

**Objective**: The Functional Movement Screen (FMS) is a pre-participation screening tool for which an overall score is given but which comprises seven individual tests, comprising standardized, compound movements that are rated from 0-3 by an examiner and include the Deep Squat, Hurdle Step, In-Line Lunge, Shoulder Mobility, Active Straight Leg Raise, Trunk Stability Push-Up, and Rotary Stability. The individual scores for each movement are combined into a final score out of 21 points, which is thought to predict injury risk. The aim of the research was to find out possible relevancy of FMS scores on sprint performance and potential relation between FMS scores and players injury history.

**Research Method**:Twenty three young male soccer players with the age of (16.4±0.5), performed FMS test.Subsequently players performed a sprint test, the performance was recorded during 0-10m, 0-20m, and 0-30m running distances.Number of the days that players not trained due to injury, is counted and types of the injuries noted.SPSS software, Fusion Sport photocell, FMS battery and injury history forms were used.

**Findings**:Correlation between injury history and FMS scores was %41.6.Connection between FMS scores and sprint performance for 10,20,30 meters was respectively %87.9, %91.5, %89.9

**Conclusion**:Insignificant correlation found bewtween FMS scores and number of the days that players not trained due to injury (injury history).However important connection found between FMS scores and sprint performance.In this regard FMS could be considered as an alternative tool to test the sprint performance.Nevertheless further researchs needed to clarify efficiency of the corrective exercises to enhance the sprint performance.

Keywords: Functional Movement Screen, Sprint Performance, Injury History

# PP. 590 THE EFFECT OF FATIQUE ON LOWER EXTREMITY COORDINATION IN BADMINTON PLAYERS

Mert Aydoğmuş <sup>1</sup> , <u>Erkal Arslanoğlu</u><sup>2</sup> , Ömer Şenel <sup>3</sup>

### Abstract

**Aim:** The aim of the study was to investigate the effect of fatique on lower extremity coordination of elite badminton players.

**Method:** A total of 18 male badminton players were voluntarily participated in this study. Average age, body weight, height, and sport life of players were  $22.83 \pm 3.02$  years,  $75.87 \pm 10.25$  kg,  $179.54 \pm 5.15$  cm and  $10.82 \pm 3.24$  years respectively. The participants were subjected to shuttle run test modified for maximal ve submaximal loadings. The shuttle test was started with 8 km/h at a constant slope and the speed was increased by 2 km/h after the first three minutes and 1 km/s for the following three minutes. The coordination of the participants were measured with Monitored Rehab Systems(functional squat) apparatus and the heart beat rates were determined with a transmitter placed at the chest and a Polar watch at the arms of the participants. Lower extremity coordination were measured after each loadings on treadmill with Functional Squat System (Monitored Rehab System

<sup>&</sup>lt;sup>1</sup> Hacettepe University Faculty of Sport Sciences

<sup>&</sup>lt;sup>1</sup> Karabük University Hasan Doğan School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Kafkas University Sarıkamış School of Physical Education and Sports

<sup>&</sup>lt;sup>3</sup> Gazi University School of Physical Education and Sports

Co.). The participants were tried to keep the point they saw on the monitor at a certain line by the eccentric and concentric contractions using their feet (the feet are kept on the footplate). Deviations that occur on the line (cm) gave us information about the subject's coordination. Tests were performed in both legs. The analyses of the data were performed by the use of a nonparametric test of Wilcoxon marked lines test due to the fact that the data did not show a normal distribution.

**Findings:** According to the findings, lower extremity coordination of the subjects did not demonstrate the expected reduction. After maximal and submaximal loadings there were no significant differences between pre-post test results (p>0,05).

**Results:** Expected reduction did not occur because of elit athletes. Therefore, we can say that a high degree of fatigue in elit badminton players does not cause loss of coordination.

**Keywords: Badminton, Coordination, Fatigue** 

# PP. 591 RELATIONSHIP BETWEEN WEIGHT LOSS AND LACTATE CONCENTRATION OCCURING IN MATCH CONDITIONS IN ELITE GRECO-ROMAN WRESTLERS

Erkal Arslanoğlu<sup>1</sup>, Ömer Şenel <sup>2</sup>

### **Abstract**

**Purpose:** The pupose of this study was to investigate weight loss and lactic acid relation during wrestling match in elit Greco-roman wrestlers.

**Method:** This study was performed in National Preparation Camp before the International Prix Samurgashev Tournement that located in Turkish Wrestling Federation. Totally 24 wrestlers participated into the study. The mean age and height were  $18,61 \pm 1,01$  years and  $173 \pm 8,79$  cm respectively. Totally 12 match analyzed. Height, body composition, hearth rate, body weight, weight loss and lactat levels of wrestlers were measured by standardized tests. SPSS 17 statistical software and the descriptives statistics, paired samples t test and correlation anlysis were used to evaluate obtained data. Significant level was taken 0.05.

**Findings:** There were significant differences before match and during match in weight loss, heart rate and lactate levels of wretslers when compared own groups. But there were no significant changes between weight loss and lactate relation before and during wrestling match (p>0.05).

**Result:** It can be said that, there were no relation between weight loss and lactate concentration which causes fatique occured in match conditions. For that reason, weight loss which occurs during wrestling match not related to accumulated lactate in blood.

Keywords: Wrestling, Greco-Roman, Lactate, Weight Loss

# PP. 592 NITRIC OXIDE RESPONSE TO MAXIMAL ACUTE EXERCISE IN AEROBIC AND ANAEROBIC ATHLETES

 $\underline{\mathsf{Mehmet}}\, \underline{\mathsf{Zeki}}\, \underline{\mathsf{Ozkol}}^{\, 1},$ S. Rana Varol $^1$ , Faruk Turgay $^1$ , Faik Vural $^1$ , Tolga Akşit $^1$ 

### Abstract

Aim: released from many tissues such as venous endothelium and muscles, nitric oxide (NO) has vasodilator, antioxidant, anti-atherosclerotic and metabolic regulator properties. Studies have shown that support of L-arginine, a precursor of nitric oxide, decreases lactate values during submaximal exercise in humans and increases work capacity with an increase in NO production. Relations have been found between aerobic capacity and basal blood NO levels; and aerobic exercise has been

<sup>&</sup>lt;sup>1</sup> Kafkas University Sarıkamış School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Gazi University School of Physical Education and Sports

<sup>&</sup>lt;sup>1</sup> Ege University School of Physical Education and Sports

determined to increase basal blood NO levels. In addition, relations between anaerobic exercise performance and are not sufficiently clear yet. Exercise participation and physiological requirements of muscles are different in aerobic and anaerobic activities. Therefore, relations of aerobic and anaerobic loads with NO or the role of NO in these loads may be different. For these reasons, the present study aimed to examine the relation of the blood NO difference at acute anaerobic and aerobic [lactate minimum speed test (LMSt)] loads and NO with lactic acid in aerobic and anaerobic groups. **Method:** The participants of the study were a total of 33 healthy volunteers aged 20-25 having similar characteristics and studying at School of Physical Education and Sports high schools, 11 of whom were in the branch of volleyball (Anaerobic Group=AnG, 21.7±1.1 years, 185.3±5.6 cm, 79.1±6.7 kg), 11 in swimming (Aerobic Group=AeG,  $21 \pm 1.4$  years,  $178.4\pm 7$  cm,  $75.5\pm 9.8$  kg) and as the control group, 11 male subject (KG, 21.7±1 vil, 182.2±6.5 cm, 77.2±6.2 kg) who had not exercised regularly for the past 3 months; and approval of the Ege University Ethics Committee was taken. The volleyball group had an average 10 years of experience while the swimming group had 12 years. As required by the LMSt protocol (Simoes et. al, 2003), each subject was given 3 acute exercise phases. The first of these phases is the supramaximal Wingate (Monark 824 E, Sweden) cycle test (WAnT). In order to eliminate the increased lactate values and buffer the metabolic acidosis produced after the 5-minutepassive rest following WAnT, an active recovery phase (ARP) was held on the treadmill (Star Trac TR 4000, USA). ARP was in the form of 3 different submaximal intermittent running exercise each step of which lasted 4 minutes at increasing intensity. This phase continued to the lactate minimum point where a balance occurs between lactate production and elimination. At this point a reloading phase (RP) was held which continued up to maximal. RP was in the form of a 3 different 4-minute-exercise at increasing intensity. For each subject, load increase was carried on until they could no longer continue running. Unable to run, the samples mostly left the test at the 6<sup>th</sup> step. At the end of this test, the speed (km/h) at which the lactate level was minimum was called lactate minimum speed. NO analysis in the fingertip blood was done using spectrophotometric method (Shimadzu UV 160 A, Japan), with the 'Griess method' which uses cadmium as reducer. Nitric oxide and lactic acid measurements were taken prior to and following WAnT in LMSt, and at certain steps of ARP and RP tests. Lactic acid analysis was done with electro enzymatic method (YSI 1500 Sport Lactate Analyzer, USA). SPSS 11.0 statistics program was used for data analysis, value of significance was accepted as

**Results:** At peak power, significant differences were found among all 3 groups (p<0.001), the highest value was observed in AnG' (13.1±0.9 W/kg). AnG lactate value was significantly higher than that of AeG (p<0.05) following WAnT. AeG lactate minimum speed value (11.5±1.1 km/h) was significantly higher than that of KG (p<0.05). A significant effect of the maximal loading (WAnT) was observed on the nitric oxide levels in AeG (p<0.05), NO value was found to be %25.6 less than the resting value. The ( $\Delta$ WNO) value of the difference between AeG resting plasma NO and blood NO value following WAnT was significantly higher than that of AnG and KG (p<0.05). AeG NO value following RP was (9.2%) higher, though not significantly, than the lactate minimum point NO value which is accepted as the basal value of this phase. In AeG, a positive relation was found (r= 0.628, p<0.05) between the delta lactate value and delta NO value ( $\Delta$ LMNO and  $\Delta$ LMLA) between WAnT and lactate minimum point.

Conclusion: It was observed that WAnT decreased blood NO level significantly in the aerobic group. These findings show that the NO responses of the aerobic group to both maximal exercises (WAnT and RP) are more effective than those of the anaerobic group. Moreover, relations found between  $\Delta$ LMNO and  $\Delta$ LMLA in AeG indicate that the anaerobic condition occurring after WAnT can repress NO levels or decrease the survival time of NO (bio-efficacy).

Keywords: Nitric Oxide, Lactate Minimum, Aerobic Training, Anaerobic Training

p<0.05 for the relations between data and statistical differences among groups.

## PP. 594 AN ASSESSMENT OF THE STATIC AND DYNAMIC BALANCE PERFORMANCE OF FOOTBALLERS BASED ON THEIR POSITIONS

 $\underline{\text{Hamza Küçük}}^1$ , Mehmet Yalçın Taşmektepligil  $^2$ , Soner Çankaya  $^3$ , Musa Çon  $^2$ 

### **Abstract**

**Aim**:The purpose of this study was to compare the static and dynamic balance performances of footballers playing in different positions.

**Methods**:30 defenders, 35 midfielders and 30 forwards who had played at least 7 seasons of football were included in the study. Balance measurements of the participants were made by using Isotonic Balance Test System. In the static balance measurement, participants tried to keep the cursor which was shown on the screen static to the balance point within 30 seconds on the balance platform. The method was based on the preference of dominant and non-dominant leg as eyes open-closed with both feet and eyes open-closed. In the dynamic balance performance, sensitivity of the balance platform was lowered and the cursor seen on the screen was asked to be moved with body swing position within 60 seconds.

**Findings**:Firstly, the data obtained in this study was evaluated with Shapiro-Wilk test for normality assumption and with the Levene's test for the assumption of homoscedasticity. Due to providing necessary assumptions, one-way ANOVA and Tukey's HSD test were used to determine the performance differences for both static and dynamic balance according to the players' position. As a result of the analyses, pressure on the X platform based on both feet balance scores was 1,56 for defenders, 1,37 for midfielders and 1,56 for forwards. Scores of pressure on X platform was 1,63 for defenders, 2,05 for midfielders and 1,90 for forwards. Pressure on X platform based on dominant leg preference was 3,83 for defenders, 2,85 for midfielders and 3,40 for forwards. Scores of pressure on Y platform was 2,96 for defenders, 2,51 for midfielders and 2,96 for forwards. In terms of dynamic balance performances, defenders had a balance score of 1,30, midfielders had a balance score of 1,29 and forwards had a balance score of 1,34. When the significance of balance scores between positions was analyzed, no difference was found between groups in terms of both feet static balance and dynamic balance scores. A significance was found in X platform pressure values based on dominant leg preferences in favor of midfielders (P<0,05).

Results: When the game of football is analyzed, it can be seen that midfielders are chosen from players who have more technical skills. Midfield is where goal attacks will be started and organized. In contrast, defenders do not have so many technical skills; however, they are stronger. Similarly, it can be said that forwards are chosen from fast players instead of players with high technical skills. The fact that balance scores show significance in terms of dominant leg preference can be associated with the high technical capacity in midfielders. Since a continual exercise of a skill can be effective on different variables, a positive association can be considered between balance scores and technical skill. Mostly, there are studies on the aerobic and anaerobic strength capacity of footballers. There are few studies on balance performance. However, defining the association between skills and different biomotor features can guide studies in this field. This study is important in terms of determining the association between footballers' technical skills and balance scores.

Keywords: Dynamic Balance, Footballers, Static Balance

<sup>&</sup>lt;sup>1</sup> Ondokuz Mayıs University Institute of Health Sciences

<sup>&</sup>lt;sup>2</sup> Ondokuz Mayıs University Yaşar Doğu Faculty of Sport Sciences

<sup>&</sup>lt;sup>3</sup> Ordu University Faculty of Medicine Department of Biostatistics

# PP. 603 UEFA CHAMPIONS LEAGUE AND UEFA EUROPA LEAGUE FOOTBALL MATCHES SOME OF THE STATISTICS IN TERMS OF COMPARISON

 $\underline{\text{Muhammed Zahit Kahraman}}^1$ , Arslan Kalkavan  $\underline{^2}$ , Nurullah Emir Ekinci  $\underline{^3}$ , Şeyhmus Baysal  $\underline{^4}$ 

### **Abstract**

**Purpose;** the purpose of this study, the UEFA Champions League and UEFA Europa League football matches of the lake, total shot, hit the shot, corner kick, foul, offside, red card and yellow card in terms of statistics is to compare.

**Method;** study of the Union of European Football Associations (UEFA) 2013-2014 season of the UEFA Champions League men's league at 48, 60 of the UEFA Europa League competition with a total of 108 events were investigated. Save the statistics program of the competition with broadcasters data from the website and the data were examined individually. Analysis of the data obtained in the study was performed using the SPSS program. Statistical analyses descriptive statistics and  $\alpha$ =0.05 level for two different groups independent samples t-test was used.

**Findings;** analyzing the results of descriptive statistics, average goals in the Champions League 3,25±1,73, the European League 2.42±1,33, the average total shot, in the Champions League 25,79±6,61, European League 24,37±6,39, average hit the shot, in the Champions League 12,23±4,56, European League 9,42±3,70, the average corner kick in the Champions League 10,44±3,15, European League 9,67±3,83, the average foul, in the Champions League 24,83±5.42, European League 25,62±7,17, offside average, in the Champions League 4.92±2,73, European League 3,98±2,65, the average red card, in the Champions League 0,13±0.39, European League 0,07±0,25, the average yellow card in the Champions League 3,75±1,79, European League 4,02±1,72, respectively.

**Result;** in conclusion, the UEFA Champions League and UEFA Europa League goal, and hit the shot of the mean difference was significant (P <0.05), total shots, corners, fouls, offsides, red cards and yellow cards mean the difference in being insignificant (P>0,05) was determined. UEFA Champions League in goals average  $(3.25 \pm 1.73)$  UEFA Europa League according to  $(2.42 \pm 1.33)$  was significantly higher, the UEFA Champions League in the accurate shot average  $(12.23 \pm 4.56)$  UEFA Europa according to League  $(9.42 \pm 3.70)$  was significantly higher due to the fact that it is believed. Total shots, corners, fouls, offsides, yellow cards and red cards were not meaningful differences in mean UEFA Champions League and UEFA Europa League as the level that is thought to be close to each other.

Keywords: Football, Champions League, Europa League

# PP. $604\ 2010\ AND\ 2014\ FOOTBALL\ WORLD\ CUP\ COMPETITIONS\ SOME\ OF\ THE\ STATISTICS\ IN\ TERMS\ OF\ COMPARISON$

 $\underline{\text{Cuma Ece}}^1$  , Arslan Kalkavan  $^2$  , Muhammed Zahit Kahraman  $^3$  , Şeyhmus Baysal  $^4$ 

### Abstract

**Purpose;** the purpose of this study, 2010 and 2014 World Cup football matches, goals, total shots, accurate shot, corner kick, hit the middle, total medium, foul, offside, yellow cards and red cards is

<sup>&</sup>lt;sup>1</sup> Police Academy Bitlis Police Vocational School

<sup>&</sup>lt;sup>2</sup> Karadeniz Technical University School of Physical Education and Sports

<sup>&</sup>lt;sup>3</sup> Dumlupınar University School of Physical Education and Sports

<sup>&</sup>lt;sup>4</sup> Ağrı İbrahim Çeçen University Faculty of Education

<sup>&</sup>lt;sup>1</sup> Sakarya University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Karadeniz Technical University School of Physical Education and Sports

<sup>&</sup>lt;sup>3</sup> Police Academy Bitlis Police Vocational School

<sup>&</sup>lt;sup>4</sup> Ağrı İbrahim Çeçen University Faculty of Education

compared in terms of statistics.

**Method;** in the study of International Football association (FIFA) World Cup men's competition of the 2010 World Cup in South Africa is 48, The 2014 Brazil World Cup competition 48 with a total of 96 competition was investigated. 2. Tour and some of the final stage of the competitions at the end of 90 minutes can not be taken as a result of 15 minute 2 period of extra time is played in the alliance. This statistics also affects. Therefore, as the data received matches the 90 minute time points, and played according to the procedure in each group of 4 countries of each group of 8 covers all competitions. Broadcaster of statistical programs recorded with the event data from the website, and the data were examined. The analysis of the data obtained in this study using the SPSS statistical program was used. Statistical analyses descriptive statistics and  $\alpha$ =0.05 level of significance for two different groups of independent samples t-test was used.

**Findings;** Analyzing the results of descriptive statistics goal average, 2.10±1.51 in the 2010 World Cup, the 2014 World Cup as 2.83±1.71, average total shots, 28.04±7.30 in the 2010 World Cup, the 2014 World Cup at 26,58±6.73, the average shots hit, World Cup 2010 at 8.29±3.28, 9.00±3.02 in the 2014 World Cup, the corner kick average, 9.33±3.24 in the 2010 World Cup, 9.87±2.91 in the 2014 World Cup, the appropriate medium average, 8.64±3.75 in the 2010 World Cup, 8.35±3.23 in the 2014 World Cup, the total medium average, 40.60±9,60 in the 2010 World Cup, 37.35±8.94 in the 2014 World Cup, Foul average, 39.70±7.19 in the 2010 World Cup, 28.70±6.63 in the 2014 World Cup, the offside average, 5.02±2.69 at 2010 World Cup, 4.35±2.66 in the 2014 World Cup, the average yellow cards, in the 2010 World Cup, 38.1±1.94, 2.62±1.23 in the 2014 World Cup, the average red card, the 2010 World 0.27±0.44 in Cup, world Cup 2014 at 0.18±0.39 respectively.

**Result;** in conclusion, the 2010 World Cup and 2014 World Cup between the yellow card mean the difference was significant (P<0.05), goals, total shots, accurate shot, corner kick, hit the medium, the total medium, foul, offside and a red card mean difference in were insignificant (P>0.05) were identified. 2014 World Cup competitions in continuous violation of the rules of the game unsporting behavior, competitions, etc. An appeal against the referee. cases less can be said that according to the 2010 World Cup.

**Keywords: Football, World Cup** 

# PP. 606 THE EFFECTS OF EMS EXERCISES ON BODY COMPOSITION, ANTHROPOMETRIC CHARACTERISTICS AND SINGLE REPEAT MAXIMAL STRENGTH OF QUADRICEPS AND HAMSTRING MUSCLES

Mustafa Köksal <sup>1</sup>, Turan Karagöz <sup>1</sup>, Bergün Meriç Bingül <sup>1</sup>, Menşure Aydın <sup>1</sup>, <u>Çiğdem Bulgan</u><sup>2</sup>

### **Abstract**

**Aim:** The aim of this study was to investigation of the effects of exercises using EMS device (Electrical Muscle Stimulation) on body composition and some anthropometric characteristics and also it was aimed to research that effects of these exercises on single repeat maximal strength of quadriceps and hamstring muscles.

Method: Three male and three female students (mean age 22,6±1,89 years, mean height 172±1,70cm, mean body mass 71,6±12,32kg, training experience 7,83±1,61 years) from School of Physical Education and Sports, Kocaeli University, were participated to this study. Participants were applied EMS exercises, two days a week and twenty minutes per day during eight weeks. Before and after the exercises, their body composition and anthropometric characteristics were recorded. Additionally, single repeat maximal strength of quadriceps and hamstring muscles were measured in Fitness Hall, Kocaeli University using Leg Extension and Leg Curl machines. SPSS version 16.0 for windows (SPSS, Chicago, IL) was used for statistical analyses. Wilcoxon test used for comparison of the pretest and posttest results of measured parameters.

**Results:** In results, after eight weeks EMS exersice programme, there were statistically significant differences found in single repeat maximal strength of the leg muscles between pretest and posttest

<sup>&</sup>lt;sup>1</sup> Kocaeli University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Haliç University School of Physical Education and Sports

(p<0,05). Although there were no significant differences in some anthropometric characteristics such as age (p=0,13), height (p=0,15), shoulder (p=0,35), chest (p=0,14), waist (p=0,10), hip (p=0,15), femur (p=0,18); it was found significant differences in body mass (p=0,01) thigh (p=0,01), arm (p=0,02) and fat ratio parameters (p<0,03).

**Conclusion:** As a conclusion, when applied to EMS exercises were to provide a positive contribution to the performance and some body composition characteristics. Electrical Muscle Stimulation exercises can be used for improve the strength of the muscles with training specific to each sport branch and it is recommended that to periodically used in the preparation season of athletes.

Keywords: Body Composition, EMS, Anthropometric And Maximal Strength

# PP. 607 THE EXAMINATION OF SOME ANAEROBIC PERFORMANCE PARAMETERS OF YOUNG BASKETBALL PLAYERS

Gökhan Deliceoğlu <sup>1</sup>, Erdal Arı <sup>2</sup>, <u>Selman Kaya</u> <sup>1</sup>

- <sup>1</sup> Kırıkkale University School of Physical Education and Sports
- <sup>2</sup> Ordu University School of Physical Education and Sports

### **Abstract**

**Aim:** The aim of this purpose is to examine interaction levels of anaerobic abilities of young basketball players.

**Method:** The nineteen young basketball players joined to this investigation as voluntarily (Body mass:  $71,79 \pm 7,06$  kg., body weight:  $186,00 \pm 5,83$  cm.). The 10 and 20 m. sprint, anaerobic power, proagility test, vertical and active jump values, mean jump number and height, touch to floor and staying at air times during thirty seconds jump test period, sound, light and sound-light 5 m. sprint and reaction times were measured. The active recovery period was performed among test protocols and all tests were done in two days period. The velocity and reaction times were measured via optical measurement device developed by Sport Expert. The vertical jump values were measured by Optojump test system. The correlations between sound, light, sound-light 5 m. reaction, sprint values and anaerobic performance parameters was determined by Pearson correlation coefficient. The statistical significiance value was set at p<0.05 level. All statistical analyzes were done by SPSS 16.0 package programme.

Findings: According to analyze results, no significant correlation was seen between light reaction times (0,49±0,08 sec.) and anaerobic performance parameters (p>0.05). It was seen significant correlation between light 5 m. sprint times (1,18±0.06 sec.) and 10, 20 m. sprint times (1,92±0,07 sec., 3,26±0,15 sec., p<0.05, respectively) but no significant correlation was determined between light 5 m. sprint times and other anaerobic performance parameters (p>0.05). The significant correlation was seen among sound reaction times (0,50±0,03 sec.), 10 and 20 m. sprint times, anaerobic power  $(36.17\pm6.46 \text{ W/kg.})$ , pro-agility test value  $(4.72\pm0.24 \text{ sec.})$ , mean touch to floor  $(0.24\pm0.02 \text{ sec.})$ , staying at air times (0,48±0,03 sec.), jump height (29,32±4,15 cm.) during thirty seconds jump test period (p<0.05). No significant correlation was seen between sound reaction times and other anaerobic performance parameters (p>0.05). The significant correlation was seen among sound 5 m. sprint times (1,16±0,06 sec.), 5 and 10 m. sprint times, pro-agility test value, mean staying at air times during thirty seconds jump test period (p<0.05) but no significiant correlation was seen between sound 5 m. sprint times and other anaerobic performance parameters (p>0.05). The sound-light reaction times  $(0.5\pm0.05 \text{ sec.})$  had no correlation with other anaerobic performance parameters (p>0.05). The significant correlation was seen between sound-light 5 m. sprint times (1,19±0,06 sec.) and 20 m. sprint times (p<0.05) but sound-light 5 m. sprint times had no significant correlation with other anaerobic performance parameters (p>0.05).

**Conclusion:** It was determined that sound reaction and sound 5 m. sprint times of young basketball players had more correlation with anaerobic performance parameters. Therefore, it was said that sound reaction times of young basketball players related to anaerobic activities mostly when sound, light and sound-light reaction times of players were compared.

Keywords: Reaction, Anaerobic Performance, Sprint, Jump

### PP. 617 EFFECTS OF DIFFERENT STRETCHING TECHNIQUES ON ANAEROBIC PERFORMANCE

İrem Bıçkıcı <sup>1</sup>, <u>Hakan Yarar</u> <sup>1</sup>, Çetin Çelebioğlu <sup>1</sup>, Ümid Karlı <sup>1</sup>, Nurgül İkizoğlu <sup>1</sup>, Hüseyin Aksu <sup>1</sup> Aban İzzet Baysal University School of Physical Education and Sports

### **Abstract**

**Introduction and Purpose:** Many athletes perform various stretching exercises as a part of a warm-up prior to physical activity and sports competition in order to enhance athletic performance and prevent injuries. However, in the literature; there is not enough information about the effects of stretching techniques on athletic performance and the results of several previous studies are conflicting on the benefits and disadvantages of the different stretching techniques. The purpose of this study was to investigate the effects of static and PNF stretching techniques on peak power, average power and fatigue index.

Materials and Methods: Fifteen active male athletes whose age, stature, body mass and body fat percentage are 20,20±2,75year, 176,±7,46cm, 69,23±5,38kg and 12,22±2,60%, respectively were participated in this study as volunteers. Randomized cross-over experimental design was used in in this study. The athletes were participated in static stretching (SS), proprioceptive neuromuscular facilitation (PNF) and no stretching (baseline) applications in randomized manner with a two day intervals between trials. Stretching exercises were applied to hamstrings, quadriceps and calf muscles for both legs following five minutes standard warm-up. SS application was performed 3x30sec on each muscle group, with 10 seconds resting intervals between sets. PNF exercise was performed in three stages. In the first stage 10 seconds passive stretching was performed by the researcher until the subject feels pain on his muscle. In the second stage the subject applied resistance against the stretching pressure of the researcher, for 6 seconds. In the last stage again passive stretching was applied by the researcher for 14 seconds. Same as in the SS, each set of PNF application was taken totally 30 seconds and this application was repeated three sets with 10 seconds resting intervals, for each muscle group. All stretching exercises were applied by the same experienced researcher, to the both legs of the subject. In control trials (baseline), subjects were directly started to anaerobic test after a five minutes standard warm-up period without applying any stretching exercises. After stretching exercise protocols, Wingate 30 sec anaerobic test (WAnT) was conducted for the evaluation of anaerobic performance. Maximum peak power, average power and fatigue index was determined by WAnT. Repeated measures of ANOVA was used for statistical analyzes.

**Results:** According to repeated measures of one way ANOVA significant difference (F  $_{(2-28)}$  = 6,771; P=0,004) was determined between trials regarding to peak power values. After the follow up test, significant differences was identified between PNF (12.70 W/kg) and SS (12.07 W/kg) trials, in favor of PNF. There was no significant differences between stretching trials regarding to average power (F  $_{(2-28)}$  =0,639; P=0,535) and fatigue index (F  $_{(2-28)}$  =0,56, P=0,577).

**Conclusions:** As a result, SS applications following warm-up periods leads to loss of athletic performance which requires explosive power efforts. On the other hand, PNF stretching applications do not cause any performance loss. It is concluded that, PNF type of exercises are more appropriate when stretching exercises are needed following warm-up periods, especially in the sports which require short term explosive power.

Keywords: Static Stretching, Pnf, Peak Power, Average Power, Fatique Index

# PP. 624 THE RELATION BETWEEN RUNNING SPEED PARAMETER AT ANAEROBIC THRESHOLD AND RECOVERY IN ELITE SOCCER PLAYERS

Emin Süel<sup>1</sup>, Hüseyin Özkamçı<sup>2</sup>, İbrahim Şahin<sup>1</sup>, Haluk Süel<sup>1</sup>, Rıfat Demir<sup>1</sup>

### **Abstract**

**Purpose:** The purpose of this study was to determine the relation between the running speed parameter at anaerobic threshold and the lactate half life time of peak as a recovery parameter following overloads at supramaximal intensity.

**Subjects:** In this study, 15 footballers who have body height of  $177.9 \pm 7.85$  cm, body weight of  $78.21 \pm 6.38$  kg, body fat percentage of  $9.78 \pm 2.50$  % and play in the Azerbaijan Topaz Super League participated voluntarily.

Methods: All of the measurements made of the two-period team competitions during the season, was carried out in the preparation period. The participants' anaerobic threshold levels were measured following the Modified Shuttle Test. Then The RAST Test was performed to the athletes, the lactic acid analyses were done providing that the blood samples must be taken from an ear-lobe in a sitting position once in each 3 minutes after the test was over. The collection process of blood samples were carried out until the blood lactate concentration was reduced to the half of peak lactate level after the test. These tests were performed in a field. After the Modified Shuttle Test anaerobic threshold running speed on computer in Microsoft Excel software was detected with the help of 2 or 3 degree polynomial. All statistical processing of the data again with SPSS 17.0 statistical software package was analyzed. Leven Test of homogeneity of variance of the data analysis with the normal distribution with the Shapiro-Wilk test was performed, to determine the relationship between variables Pearson's correlation coefficient calculation method is used.

**Results:** These analyses showed that there was a highly negative relation between the running speed parameter at anaerobic threshold and the lactate half of peak as an indicator of recovery speed (r=-0,669;p<0,05). In the light of data, it is thought that the running speed parameter at anaerobic threshold is a great indicator of aerobic endurance, and a great indicator of recovery speed following supramaximal overloads in footballers.

Keywords: Lactate Haf Life of Peak Time, Anaerobic Threshold, Recovery, Rast Test

# PP. 628 EFFECT OF ANTERIOR CRUCIATE LIGAMENT AND BUCKET HANDLE MENISCUS TEAR ON ISOKINETIC KNEE EXTENSION-FLEXION PEAK TORQUE VALUES: A CASE REPORT

Ayhan Taner Erdoğan <sup>1</sup>, Gökhan Umutlu <sup>1</sup>, <u>Uğur Can</u> <sup>1</sup>

### **Abstract**

PURPOSE:The subject who diagnosed with Anterior Cruciate Ligament (ACL) and bucket handle meniscus tear voluntarily participated in isokinetic knee extension and flexion peak torque measurement carried out in our laboratory before injury occurred. Two weeks later, following the measurement subject was injured in his left knee.

The knee extensors and flexors are important dynamic stabilizers; if weakness occurs in these muscles it could diminish knee joint stability. With this in mind, the purpose of this study was to determine the knee extension and flexion peak torque values of the injured knee diagnosed with ACL and bucket handle meniscus tear at baseline (before injury), 3<sup>rd</sup> and 6<sup>th</sup> week of injury.

METHOD:Male patient is 26 years old, 182 cm in height, 85 kg, and active elite basketball player. According to the results of the left knee MRI examination; grade II degeneration was diagnosed in the

<sup>&</sup>lt;sup>1</sup> Aksaray University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Düzce University School of Physical Education and Sports

<sup>&</sup>lt;sup>1</sup> Mersin University School of Physical Education and Sports

dorsal horn of the medial meniscus. In the dorsal horn of the lateral meniscus showed partially extending into interkondil NOC (bucket handle tear may be compatible with). Irregular appearance along anterior cruciate ligament contour and heterogeneous oedema signal increment at this level was also noted. It was, initially, evaluated for rupture and correlation of it with clinical findings were recommended. The posterior cruciate ligament was at its normal morphology and signal intensity. At the level of the lateral femoral condyle, there were oedematic contusional changes in the tibia intereminential region and at the lateral tibial plateau. Although the integrity of the medial collateral ligament was fully compatible, signal increase was noted consistent with grade II sprain. Patellar and quadriceps tendons were found to be normal. The level of knee joint fluid was slightly increased. Effusion in suprapatellar fossa and the profile compatible with suprapatellar plica within effusion was noted.

Three and 6 weeks after injury, the individual were performed to isokinetic knee extension and flexion strength tests in the same laboratory and under the same conditions. The participant fastened to seat from thighs, trunk and pelvic regions through belts. Moreover, the ankle joint was stabilized via a cushion pad to the dynamometer arm. The actuator and the individual's position were set to be at the level of rotation of the lateral femoral epicondyle. Flexion and extension angles was set to once leg in full extension position of 0  $^{\circ}$  and flexion of the 90  $^{\circ}$  and gravity correction has been made. The necessary explanations were made before the test and the participant were informed about the test. Individuals accustomed to one set 8 repetitions of concentric knee extension and flexion test then conducted the 3 sets of 5 knee extension and flexion test at 60  $^{\circ}$  / sec angular speed. During testing, subjects were given verbal stimuli.

RESULTS:Baseline right and left extension peak torques were 255Nm and 277Nm while right and left flexion were 134Nm and 122Nm, respectively. In the 3rd week following the injury; right and left extension peak torques were 274Nm and 198Nm while right and left flexion peak torques were 159Nm and 100Nm, respectively. At the sixth week, the left and right extension peak torques were 241Nm 287Nm, while the left and right flexion peak values were 152Nm and 119Nm, respectively. On the basis of pre-injury values, reasonable reductions were observed at the peak torque values for the left knee in the 3rd week (extension: %28,52 flexion: %18,03) and in 6th week, even though an increment was seen (extension: %12,99 flexion: %2,45) in the peak torques basal values were not reached. A loss of strength occurs in the knee joint diagnosed with the anterior cruciate ligament degeneration and percent change in peak torque values of the knee in 3rd and 6th weeks after injury was as reported above.

CONCLUSION:Our results indicated that major strength loss occurred in the extension more than flexion. At the end of 6th week, the participant was not able to reach his left knee basal extension strength values (12.99% difference) while he almost reached his left knee baseline flexion values (2.45% difference).

Keywords: Anterior Cruciate Ligament Tear, Knee Extensors and Flexors, Peak Torque

## PP. 632 KINEMATIC EVALUATION OF DIFFERENT START TECHNIQUES ON SWIMMING PERFORMANCE

Nusret Ramazanoğlu $^1$ , Yaşar Tatar  $^1$ , Begüm Pişkintaş  $^1$ , Göktuğ Şanlı  $^1$ , Nejla Gerçek  $^1$ , Selda Uzun  $^1$ , Semih Yılmaz  $^1$ , İrfan Gülmez  $^1$ 

### **Abstract**

**Purpose:** The main goal of this research is to examine the effects of grab-start, track-start and kick-start techniques on start reaction and total swimming time.

**Method**: 19 elite swimmers (Age; 16.84±1.68 year, Body mass; 72.16±7.16 kg, Height; 179.95±5.80 cm. BMI; 22.28±1.91) participated in this study.

Start reaction (elapsed time from start signal to takeoff) and start efficiency (elapsed time signal to finish, taken when touched to touchpad) times were recorded by a touchpad positioned at 15 m distance from starting block and electronic time system (Omega, ARES21, Switzerland) for grab-start,

<sup>&</sup>lt;sup>1</sup> Marmara University School of Physical Education and Sports

track-start and kick-start techniques.

The swimmers completed a 10 minute warm up on the ground and in the water, performed warm up trials and pre-race routines before testing. Normal competitive starting procedures were used for each test. Participants performed two trials for each start technique. The best score of these two trials were recorded as start reaction and start efficiency time. There were at least ten minute rest intervals between trials.

**Results:** One way analysis of variance (ANOVA) on rank was conducted in evaluation of this study. The mean time values of start reaction on block are  $0.7695\pm0.048$  seconds for grab-start,  $0.7132\pm0.068$  seconds for track-start and  $0.6632\pm0.052$  seconds for kick-start. The average start reaction was significantly shorter for kick-start position than both grab (P=0.00) and tract-start (P=0.025) positions (p<0.05). Also the mean time for the track start was significantly less (p=0.010) than the grab start.

Although no statistically significant differences were found for start efficiency times between start techniques (p>0.05), the kick-start technique (6.6800±0.527 sec) was faster than both grab-start (6.8089±0.619 sec), and track-start (6.7332±0.498 sec) techniques.

Conclusion: According to the results in this study, it is seen that kick-start technique is significantly faster than both track-start and grab-start techniques and track-start technique is significantly faster than grab-start technique in start reaction time. Although there is no statistically significant difference between total swimming times (start efficiency), differences of 11 per thousand between grab-start and track-start, and 8 per thousand between track-start and kick-start could taken into consideration because the results of competitive swimming events are determined by milliseconds.

Keywords: Swimming Start Techniques, Kinetics, Grab Start, Track Start, Kick Start

# PP. 635 THE EFFECTS OF TRAINING ON RESPIRATORY SYSTEM OF CHILDREN AGED 13-14

Tuba Melekoğlu<sup>1</sup>, Gürcan Ünlü <sup>1</sup>

### **Abstract**

Physical activity in childhood and adolescence provides benefits for health such as positive effects on respiratory health. Especially, diseases such as asthma and chronic obstructive pulmonary disease (COPD) influence general health negatively. The immediate and permanent changes due to regular exercise have positive impact on pathogenesis, prognosis and treatment of these diseases. The aim of this study was to analyse the effects of training on lung volumes and respiratory functions in children aged 13-14. Children who had at least 5 years training history in sports branches (SP) such as athletics, football, handball and swimming (n=28, age=13,54+0,51 yr, body mass=54,09±7,64 kg, height=162,68±7,48 cm) and not-involved in sports (NSP) (n=28, age 13,64+0,49 yr, body mass 49,94±10,00 kg, height 157,86±8,04 cm ) took part in the study. Pulmonary function tests such as vital capacity (VC), forced vital capacity (FVC) and maximal voluntary ventilation (MVV) were measured by spirometer to evaluate the respiratory volumes and functions. SPSS v.15 was used for statistical analysis. VC  $(3.57\pm0.63 \text{ L}, 2.72\pm0.56 \text{ L})$ , FVC $(3.50\pm0.64 \text{ L}, 2.70\pm0.56)$  and MVV $(127.91\pm29.48)$ L/min,  $109,10 \pm 19,07$  L/min) were larger (p<0,001) in the SP group than in the NSP group, respectively. Compared to the differences as percentages, SP group has higher values of VC %31,50, FVC %29,82 and MVV % 17,24 than NSP. The results indicate that regular training in childhood and adolescence enhances lung volumes and functions. Especially the gains in lung volumes are remarkable. Therefore, directing children to physical activity are very important to improve lung function and general health.

Keywords: Respiratory System, Adolescent, Vital Capacity, Lung Function, Children

<sup>&</sup>lt;sup>1</sup> Akdeniz University School of Physical Education and Sports

### PP. 638 WHOLE BODY VIBRATION TRAINING ON THE SEDENTARY YOUNG EFFECTS ON BODY COMPOSITION AND ANTHROPOMETRIC VALUES

#### Özgür Nalbant<sup>1</sup>

<sup>1</sup> İstanbul Gedik University Faculty of Sport Sciences

#### **Abstract**

Aim: The aim of the study is to evaluate the effect of whole body vibration training on body composition in young sedentary subjects and anthropometric measurements. Participants were selected from among university students.

Method: Participants have chosen an elective physical education studying at university, sedentary, without any acute or chronic diseases, 40 male participants aged 18-23 participated in the study. Participants after being informed about randomly is divided into two groups: the study vibration group and the control group. The study was carried out in the spring semester of the academic year and in April. Vibration in whole body vibration has been implemented in 135 degree static squat position.two days a week after a 10-minute warm-up, 4 mm amplitude and 50 Hz frequency vibration on the device. Training was rebuilt 5 active rest intervals of one minute 30 seconds. The study was completed with flexibility exercises. Aspire Voit brand vibration equipment was used as vibration apparatus. Work has been limited to four weeks. Measuring was conducted twice before and after the study. Skinfold thickness measurements of participants (calf and thigh) skinfold caliper using the brand; environmental measurements (calf and thigh) and height and weight measurements using mesure, body mass index, body fat and lean body mass measurements were taken with tanita. The obtained data were evaluated using SPSS 14 statistical program conducted descriptive statistics for the determination of the difference between the two groups and the Independent-sample t test was used. Results: According to the statistical evaluations the vibration and control groups any change weight, body mass index, body fat and lean body mass, skin fold thickness measurements, whereas

environmental measurements is showed significant difference (p < 0.05). Conclusion: Change and differentiation is said that the duration and frequency of training, can be achieved by increasing. More vibration operation may be ensured by making literature.

Keywords: Whole Body Vibration, Static Strength, Dynamic Strength, Vibration Training

### PP. 642 INVESTIGATION OF THE EFFECTS OF SLEEP DEPRIVATION ON VISUAL AND AUDITORY REACTION TIME PARAMETERS

Kutlu Aydın <sup>1</sup>, Ümid Karlı <sup>1</sup>, <u>Hakan Yarar</u> <sup>1</sup>

#### **Abstract**

**Purpose:** The purpose of this study was to investigate the effects of sleep deprivation on to visual and audial reaction times.

**Materials and Methods:** Thirteen healthy males, mean age  $22,92 \pm 2,13$  year, mean height  $176,76 \pm 6,74$  cm. and mean weight  $73,74 \pm 5,11$  kg. were volunteered to participate in this study. The order of the trials was assigned to the subjects in a randomized cross-over design and the tests were performed 1 week apart. Measurements were performed following a reference normal sleep night (RS), a partial sleep deprivation (PSD) and full night sleep deprivation (FNSD). Newtest 1000 reaction timer was used to measure the visitual and auditory reaction times, oneway repeated measures Anova Test was used for statistical analysis. After the statistical analysis there were no significant differences between trials on visual and auditory reaction time parameters (p>0,05).

**Results:** As a conclusion, visual and auditory reaction time parameters were not effected by sleep deprivation.

**Keywords: Sleep Deprivation, Reaction Time** 

<sup>&</sup>lt;sup>1</sup> Abant İzzet Baysal University School of Physical Education and Sports

#### PP. 651 EFFECTS OF SWIMMING ON PULMONARY FUNCTIONS

İsmail Koca<sup>1</sup>, Gülsün Aydın <sup>2</sup>

#### **Abstract**

**Aim of Study**:Evaluating the effect of exercise on diffusing capacity would be helpful to evaluate the ability of the pulmonary capillary bed to expand and increase its capacity to transfer gas during exercise (Wang, 2004). The aim of this study is to investigate the effects of three month swimming training on spirometric parameters.

Method:In order to obtain further insight into the knowledge relating to the effect of swimming on lung volumes, some spirometric parameters (FVC (liter), FEV1 (liter), FEF %25-75 (l/sec.), ERV (liter), VC (liter), MVV (l/min) and PEF (l/sec)) after three month swimming training were compared in ten elite male swimmers, nine swimming trained male and seven inactive male as a total of 26 male. The information was given to them and a permission paper was signed before the tests. A questionnaire was applied to swimmers, swimming trained male and inactive male to take some information about their health, training information and personal information. Electronic height and weight measurement instrument (Seca), anthropometric measurement set (Holtain) were used for the anthropometric tests. Açıkada formula was used to calculate the body fat percentage. All the subjects with the exception of inactive control group participated in swimming training and swimming technical skill training, three times a week for three months. Pre-measurements and post-measurements were made before and after three months swimming training session for each subject with spirometer (Sensormedics Vmax 29 C).

Results and Conclusion: As a result of the research there is no significant difference between the physical characteristics (body mass, BMI, %FM, FFM, FM) of swimmers, swimming trained male and inactive male. There is no significant difference on FVC (liter), FEV1 (liter), FEF %25-75 (l/sec.), ERV (liter), VC (liter) but there is a statistically significant difference on MVV (l/min) and PEF (l/sec) values of both swimmers group and swimming trained group before and after three month swimming training period. According to findings of this research it was determined that MVV (l/min) and PEF (l/sec) values of both groups increased after three month swimming training period. As a conclusion of this study suggests that swimming training have a positive effect on pulmonary function of male.

Keywords: Swimming, Pulmonary, Spirometric

## PP. 669 THE EFFECTS OF BODY COMPOSITION, ANTHROPOMETRIC CHARACTERISTICS AND SPECIFIC EXERCISE TYPES ON SERVICE PERFORMANCE IN TENNIS PLAYERS

Erhan Kara <sup>1</sup>, <u>Tolga Akşit</u><sup>2</sup>, Turan Işık <sup>3</sup>, Mehmet Zeki Özkol <sup>2</sup>

#### Abstract

**Aim:** Tennis is a branch that characteristically includes aerobic and anaerobic loads together, requires good levels of biometric features such as strength, speed, endurance, elasticity and coordination and also involves sudden and fast direction changes, which is performed with short runs and many different repeated muscle groups working in coordination. It involves different shots (forehand, backhand, service, volley) and shot techniques and has maximal or close maximal periods. In addition,

<sup>&</sup>lt;sup>1</sup> Osmangazi University Faculty of Medicine/Department of Physiology

<sup>&</sup>lt;sup>2</sup> Anadolu University Faculty of Sport Sciences/Coaching Education Department

<sup>&</sup>lt;sup>1</sup> Ege University Institute of Health Sciences

<sup>&</sup>lt;sup>2</sup> Ege University School of Physical Education and Sports

<sup>&</sup>lt;sup>3</sup> Celal Bayar University School of Physical Education and Sports

a service shot is an important criterion in determining the success of the match performance. High speed service shots hit with targeted hitting percentage help gain more points, which increases the possibility to win a match in tennis. In service shots, the speed of the ball depends on interdependent specific power and strength factors' existing as a complex whole. The aim of this study was to examine the anthropometric structures of specific exercise training in tennis players and their effects on the ball speed during a service shot.

**Method:** The experimental group of the study consisted of athletes with a mean age of  $22.8\pm1.62$  (n=10), and the control group consisted of competitor tennis players aged  $18\pm0.0$ . Radar device was used for the first and last tests of service shots of the randomly formed groups and an electronic stadiometer was used for height and weight measurements. Moreover, environmental measurement data were obtained in a total of 4 areas. Body composition (body fat ratio) was measured by taking the skinfold through obtaining skin fold thickness data from the 7 areas determined on the right side of the body. 11 different specific 6-week-strength exercises were performed 8-10 hours a week. Significance values were determined as p<0.05, p=0.00 in the data analyses.

**Results:** There was a significant difference (p<0.01 p<0.05) between the first and last service shot speeds or the experimental group. As for the control group, there was a significant difference (p<0.01 p<0.05) between their serving speed parameters as a result of the analysis. Also, there was a significant difference (p<0.01 p<0.05) between the first and last tests in the analysis of anthropometric measurement parameters of the experimental group. In the analysis of anthropometric measurement parameters of the Control group, on the other hand, there was no significant difference (p<0.05) between the first and last tests. Analysis results between the body fat ratio measurement parameters of the experimental group at (p<0.01 p<0.05) levels, there was a significant difference between the first and last tests.

Conclusion: In conclusion, it was observed that the 6-week-specific strength exercise training had positive effects on the athletes' serving speeds. In this study, for the percentage change of body fat ratio percentage, an approximate 20% decrease was seen in the experimental group whereas it decreased by nearly 13% in the control group (p>0.05). In addition, in the serving speed percentage change, it was observed that the experimental group changed by 24% while the control group changed by 5% (p<0.01). after the 6-week-exercise, no distinct change occurred in the anthropometric measurements of the experimental group (p<0.01). To sum up, the 6-week-specific exercises were found to have positive effects on the tennis players' serving performance, body composition and anthropometric characteristics. No relation was found between the serving speed percentage change and the body fat ratio percentage change of the experimental group.

Keywords: Tennis Performance, Anthropometry, Kinetic Chain, Strength, Ball Speed

### PP. 671 RELATIONSHIPS OF FREESTYLE SWIMMING PERFORMANCE WITH DYNAMIC STRENGTH AND KNEE ISOKINETIC PARAMETERS

Mehmet Kale <sup>1</sup>, Mert Erkan <sup>1</sup>, <u>Erkan Akdoğan</u> <sup>1</sup>

#### Abstract

**PURPOSE:** The purpose of this study was to investigate relationships of freestyle swimming performance with lower body dynamic strength parameters and knee isokinetic parameters.

**METHODS:** Nine male swimmers of Anadolu University Swimming Team (height: 177.5±5.2cm, body weight: 74.1±7.0kg, body fat percent (%): 12.4±4.9) voluntary participated to the study. Freestyle swimming performances (25m and 50m) were tested by a touchpad chronometer system for a semi-Olympic swimming pool (25m). One repetition maximal test for clean and half squat was used as lower body dynamic strength parameters. Knee isokinetic parameters at 60, 180, and 300osec-1 angular velocities were knee extension peak torque, knee flexion peak torque, and knee flexion/extension peak torque rate. Relationships of freestyle swimming performance with lower body dynamic strength parameters and knee isokinetic parameters were analyzed with Pearson Correlation

<sup>&</sup>lt;sup>1</sup> Anadolu University Faculty of Sport Sciences

Coefficient. Probability level was  $\leq 0.05$ .

**RESULTS:** The results of this study showed that there were no statistically relationship between the freestyle swimming performances and the lower body dynamic strength parameters. There was a statistically negative relationship between 25m-freestyle swimming performance and left knee extension torque at 60osec-1 angular velocity (r=-0.68, p<0.05). There were statistically negative relationships between 25m-freestyle swimming performance and left knee extension/flexion torque rate at 60osec-1 angular velocity (r=0.72, p<0.05) and between 50m-freestyle swimming performance and left knee extension/flexion torque rate at 60osec-1 angular velocity (r=0.68, p<0.05). There were statistically negative relationships between 25m-freestyle swimming performance and left knee extension/flexion torque rate at 180osec-1 angular velocity (r=0.72, p<0.05) and between 50m-freestyle swimming performance and left knee extension/flexion torque rate at 180osec-1 angular velocity (r=0.87, p<0.05).

**CONCLUSION:** In conclusion, much more correlation studies are necessary with different distances of freestyle swimming, different angular velocities of knee isokinetic parameters, and also different lower body dynamic strength parameters.

Keywords: Freestyle Swimming, Clean, Half Squat, Knee Extension Peak Torque, Knee Flexion Peak Torque

### PP. 673 EFFECTS OF SWIMMING TRAINING ON FEMALE AND MALE SWIMMERS' ANTHROPOMETRIC CHARACTERISTICS

İsmail Koca<sup>1</sup>, Gülsün Aydın <sup>2</sup>

- <sup>1</sup> Osmangazi University Faculty of Medicine/Department of Physiology
- <sup>2</sup> Anadolu University Faculty of Sport Sciences/Coaching Education Department

#### **Abstract**

**Aim of Study**:Body fat percentage effects especially the swimming performance. Women's high body fat percentage and low specific gravity provide lower resistance in water than man (Durusoy, 1985). Body fat percentage is decreased after the submaximal swimming training (Akgün, 1986). The aim of the study is to determine the effects of 3 month swimming training program on the anthropometric characteristics of female and male swimmers.

**Method**:Anadolu University and Osmangazi University professional female swimmers (n=9), male swimmers (n=10) and female inactive people (n=8), male inactive people (n=7) a total of 34 male who are 18-25 years old, participated in this research voluntarily. The information was given to them and a permission paper was signed. A questionnaire was applied to women to take information about general knowledge, health and physical activity status of them. Electronic height and weight measurement instrument (Seca), anthropometric measurement set (Holtain) were used for the anthropometric tests. Açıkada formula was used to calculate the body fat percentage. Pre-measurements and post-measurements were made before and after three months swimming training session for each subject three times with the same measurement protocol. All the subjects with the exception of inactive control group participated in a swimming training program in three times a week for three months.

**Results and Conclusion**:According to questionnaire it was determined that the age of female swimmers is  $20.67\pm1.00$ , male swimmers  $21.10\pm1.91$ , inactive female  $21.75\pm1.28$ , inactive male  $22.00\pm1.53$  and also training year of female swimmers is  $7.12\pm0.87$ , male swimmers  $10.75\pm0.86$ . As a result of the research there is no significant difference between pretest and post-test anthropometric parameters of inactive female, inactive male and male swimmers statistically but there is a statistically significant difference on body fat percentage, fat free mass and fat mass of female swimmers. In brief, the results this research it was determined that female swimmers' body fat percentage, fat mass decreased and fat free mass increased after three month swimming training period. The same changing was found for male athletes but not found statistically valid.

Keywords: Anthropometry, Female Swimmer, Male Swimmer

### PP. 692 THE EFFECTS OF ACUTE MAXIMAL EXERCISE ON OXIDATIVE STRESS AND ANTIOXIDANT CAPACITY IN SMOKING SUBJECTS

Serkan Revan<sup>1</sup>, Şükrü Serdar Balcı<sup>1</sup>, Hamdi Pepe<sup>1</sup>, Firuze Kurtoğlu<sup>2</sup>

#### **Abstract**

Purpose: The aim of this study was to investigate the effect of acute maximal aerobic and anaerobic exercise on oxidative stress and antioxidant enzyme levels in smokers and nonsmokers men.

Method: A total of 30 healthy, smoker (n=16) and nonsmoker (n=14) subjects, between 18 and 25 years of age, were enrolled in the study. None of the subjects were involved in any regular training program before this study, however all subjects were moderately active. Subjects performed two tests: wingate test and incremental aerobic exercise test. Blood samples were collected immediately before and immediately after exercise tests, and 30 *minutes* later and centrifuged to separate the plasma.

Results: In this study, aerobic and anaerobic exercise did not alter levels of malondialdehyde, superoxide dismutase and total glutathione in the smokers and nonsmokers (p>0.05). Although anaerobic exercise increased significantly protein carbonyl (PC) levels at immediately post exercise compared with pre exercise in non-smoker group (p<0.05), aerobic exercise did not affect the levels of PC in both groups (p>0.05). Both aerobic and anaerobic exercise increased creatine kinase levels at 30 minutes after exercise compare with pre exercise in the smokers (p<0.05).

Conclusion: Consequently, it is observed that the maximal intensity of acute aerobic and anaerobic exercise caused similar changes in oxidative stress parameters in the smokers and nonsmokers. Although both tests did not cause lipid and protein damage, they lead to muscle damage in smokers. Also, it can be said that antioxidant enzyme levels were not affected by exercise tests.

**Keywords: Acute Exercise, Smoking, Oxidative Stress** 

## PP. 693 TECHNICAL PERCEPTION ASSESSMENT FOR PERFORMANCE ENHANCEMENT OF ELITE KARATE-DO PLAYERS BY GAZE CHARACTERISTICS ANALYSIS: A PILOT STUDY

<u>Taylan Hayri Balcıoğlu</u><sup>1</sup>, Duygu Şahin <sup>2</sup>, Moataz Assem <sup>2</sup>, Adil Deniz Duru <sup>3</sup>, Dilek Göksel Duru <sup>4</sup>

#### Abstract

**Objective of the Study**: Eye tracking technology is used for distinguishing visual attention of professionals from controls in various fields. The focus in eye tracking studies for sports is on how performance of sportsmen is related with their perception. In this study, elite Karate-Do players are chosen as for the profesional group. The aim is to clarify the gazing strategy, gazing habits and patterns of the players and to compare perception, attention and assessment of players with controls. **Method**:The sportsman group include two elite Karate-Do players whereas control group include two subjects who are interested but not involved with this sport. The genders and ages are matched between the two groups. Due to device calibration disrupting structural eye problem of

one subject, two of the measurements from two of the subjects from different groups are eliminated.

<sup>&</sup>lt;sup>1</sup> Selçuk University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Selcuk University Faculty of Veterinary Medicine Department of Biochemistry

<sup>&</sup>lt;sup>1</sup> Marmara University Institute of Health Sciences

<sup>&</sup>lt;sup>2</sup> Boğaziçi University Biomedical Engineering

<sup>&</sup>lt;sup>3</sup> Marmara University School of Physical Education and Sports

<sup>&</sup>lt;sup>4</sup> Istanbul Arel University Biomedical Engineering

The experiment paradigm is set with a video made up of Kata and Bunkai sections from World Karate-Do Championships. As for the task, the subjects are asked to direct their attention towards the technicality of the players. During the experiment, the eye movements of the subjects are tracked with Sensomotoric Instruments (SMI) iView X<sup>TM</sup> RED. The maesurements are taken 65 cm away from a 22" LCD screen with 1920 x 1080 resolution, on which the video is played and the eye tracker is fixed. The system following the reflection of the eye pupil on the cornea permits measurements from subjects using glasses or contact lenses.

At the end of the video, via verbal questionare the technicality tracking of the subjects are assessed by a senior trainer who have international achivements. Apart from this questionare, for the analysis of the data, the fields on which the subjects mostly intensify and direct their gaze are determined. In order to do that, the video screen is segmented into four regions of interest which describe the left and righ fields on which two of the visible players are seen as well as to distinguish the lower and upper half of the players. Eye tracking parameters such as entrance time, waiting time, repetitive gaze and average eye fixation time are calculated with SMI BeGaze<sup>TM</sup> (Behavioral and Gaze Analysis) software. **Results**:As a result of the verbal questionare, elite players are found to capture the details more profoundly than the controls.

As a result of the analysis, the gaze of elite Karate-Do player is found to be different from the gaze of control subject. The gaze of the control subject is observed to be upon four of the fields whereas the gaze of the elite player is upon the field on which the next attack would end up. When the four fields separating the screen are examined, elite player is found to attend to only one player (left). However, the attention of the control subject is found to be directed towards the upper halves of the two players, the ones on the left and right side subsequently, in the video for the first 1265,5 ms.

In the video, there is a section taken from Unsu kata including a very fast sequence and a very slow sequence. The secreen partitions, called the lower right and lower left, depict different players. The attention of the Control subject is found to be directed towards lower right field for the fast sequence, lower left for the slow sequence. After the slow sequence, for 33 secs (47.3%) the attention is focused on the upper left on which the elite player is focused for 55 secs. (74.9%).

When the environmental perception is examined, the gaze of the elite player is found to be fixed on the center longer. The control subject is found to have a distributed gaze pattern including four of the sections without any fixation on the center. Moreover, the secondary attention centers are found to be involved with the same distribution as the primary attention centers for the control subject. The total number of fixation are found to be 171 with a duration of 380,1 ms for the elite player whereas 187 with a duration of 342,3 ms for the control subject. Although the number of the fixation of the eye movement of the elite player is less than the control subject, the duration of the fixation is higher.

**Conclusion:** In this study, weighted region of interest fixations obtained represent the cases in which the subjects' attention is uniformly distributed. This also shows the relevancy of the video and the task in this experiment.

The results show that control subject distribute her gaze to a more extended frame but catch less technical details whereas the experienced Karate-Do player fix her gaze to a specific field and catch more technical details.

Consequently, via eye tracking studies the differences in perception and attention can be found between professional and novice sportsmen. Thus, the distinguishing agents and cognitive functions can be determined for professionals and novices in various fields. Moreover, the results suggest that these kind of studies can be used for the technical enhancement assessment both as a way to create awarenes and a measurement option during the progress.

Keywords: Karate-Do, Eye Tracker, Performance Dependent Technical Enhancement Assessment

### PP. 700 EVALUATION OF STRENGTH AND BALANCE PARAMETERS OF THE 11-13 AGE GROUP TAEKWONDO ATHLETES

Selda Uzun  $^1,$  <br/> <u>Asiye Filiz Çamlıgüney</u>  $^1,$  Elif Sibel Atı<br/>ş $^1,$  Nusret Ramazanoğlu  $^1,$  İrfan Gülme<br/>z  $^1,$  Cengiz Karagözoğlu  $^1$ 

#### Abstract

**Aim:** The purpose of this study to compare the performance in strength (hand and leg) and static balance (with and without foam mat) between low-level TKD athletes (LTKD) and untrained adolescents.

Method: 12 LTKD (mean age 11.92±.90 years; height 148.29±12.49 cm; body weight 40.34±9 kg;

BMI  $18.18\pm2.39 \text{ kg/m}^2$ , fat mass  $5.72\pm3.32 \text{ kg}$ , fat%  $13.65\pm6.04$ , leg length  $70.13\pm8.35 \text{ cm}$ , foot length 24.48±8.10 cm, foot width 12.45±6.94 cm) with red belt (at least 2 year professional level) and 17 untrained adolescents who have high level of physical activity, but not to do sport regularly (participating recreational soccer or summer sport activity for two months in a year) (mean age11.35±1 years; height 144.46±8.11 cm; body weight 39.33±7.49 kg; BMI 18.76±2.51 kg/m<sup>2</sup>, fat mass 6.51±3.03 kg, fat% 16.01±5.89, leg length 70.78±6.46 cm, foot length 23.37±1.80 cm, foot width 9.01±.70 cm) participated in the study. Hand grip and leg strength was measured with a dynamometer (Takei Hand Dynamometer and leg Dynamometer, MIS Co, Tokyo, Japan). The vertical jump was employed as a measure of lower body power using a digital jump mat (double leg, right and left leg), (Newtest Systems, Finland, 2000). Force platform (Tekscan, Boston, MA) was used to measure balance parameters. Six different test conditions were done for balance measurement without foam mat (double leg eyes open (EO)/close (EC), single leg eyes open/close) and four with foam mat (TheraBand® Stability Trainer/green) (double leg eyes open (EO)/close (EC), single leg eyes open). In the static balance test, displacement of Center of Pressure (COP, cm<sup>2</sup>), anterior-posterior (A-P, cm) excursions and medio-lateral (M-L, cm) excursions were recorded for 30 s. Tests were repeated for three times and best scores were chosen for evaluation. Statistical analysis was performed to detect group differences in balance tests scores and force measurements with using Mann-Whitney-U test. **Results:** There was a significant difference between groups both right hand grip and leg strength. Hand grip (p=0.011) and leg strength (p=0.016). LTKD were greater than untrained adolescents. LTKD had significantly higher results for left leg vertical jump test (p=0.045). There was no difference between groups for vertical jump and right leg vertical jump, but LTKD had higher jump results. LTKD exhibited higher balance scores of left leg EO static balance without foam mat for COP area (cm<sup>2</sup>), A-P (cm) balance parameters which were significantly different than untrained adolescents (p<0.05)\*. No significant difference was found in the M-L (cm) excursion between groups for right leg EO open static balance test (p>0.01). No significant difference was found in the COP area (cm<sup>2</sup>). A-P (cm) and M-L (cm) between groups for right leg EO and EC static balance test without foam mat (p>0.01). There was no significant difference between groups even right leg balance values of LTKD were better than untrained adolescents. Left leg EC static balance data without foam mat, COP area (cm<sup>2</sup>), A-P (cm), M-L (cm)) were not statistically significant between groups (p>0.01). Untrained adolescents performed significantly better balance scores for double leg EO and EC balance tests (COP area (cm<sup>2</sup>), A-P (cm), M-L (cm)) with foam mat than LTKD (p<0.01).

Conclusions: These findings suggest that TKD training could enhance lower extremity muscle strength and appears to improve the single leg balance in TKD athletes of 11-13 years old. In this study we found that LTKD's handgrip, leg muscle strength and vertical jump were greater than untrained adolescents. This can be result from long term TKD training regimen and doing sport regularly. We demonstrated that LTKD had better balance scores of left leg eyes open. It can be suggested that regular TKD training for a long period results better single leg balance because of using one leg in order to kick. Untrained adolescents had good double leg balance with or without mat; this may be due to a) they play on variety of ground surfaces (garden and roads) actively, b) LTKD practice single leg training more than double leg training and c) they may not have adequate balance

<sup>&</sup>lt;sup>1</sup> Marmara University School of Physical Education and Sports

and proprioceptive training programs.

Keywords: Taekwondo, Balance, Strength, Adolescent

### PP. 711 THE EFFECTS OF COENZYME Q10 SUPPLEMENTS ON ACUTE EXERCISE INDUCED OXIDATIVE STRESS IN MALE AND FEMALE RAT HEART TISSUE

 $\underline{\operatorname{Serkan}\operatorname{Revan}}^1$ , Nilsel Okudan $^2$ , Şükrü Serdar Balcı $^1$ , Muaz Belviranlı $^2$ , Hamdi Pepe $^1$ , Hakkı Gökbel $^2$ 

#### **Abstract**

**Objective:** This study examined the effects of coenzyme  $Q_{10}$  ( $CoQ_{10}$ ) supplementation on acute exhaustive exercise-induced oxidative stress in male and female rat heart.

**Method:** Male (n=32) and female (n=32) rats were divided mainly into two groups: CoQ<sub>10</sub> supplementation group and control group. Each group was further divided into two subgroups: rest and exhausted. The CoQ<sub>10</sub> supplements were administered by intraperitoneal injection at a daily dose of 10 mg·kg-1 of body weight five days/week for six weeks. At the end of sixth week, rats in exhausted exercise group were forced to swim until exhaustion and then they were immediately sacrificed, while rats in rest group were sacrificed at rest. Rats were sacrificed and heart and liver were removed for histological analysis. Data were analyzed with a three-way repeated measures analysis of variance.

**Results:** Gender (F=7.03), exhaustive exercise (F=28.50) and  $CoQ_{10}$  supplementation (F=7.03) effect on malondialdehyde (MDA) levels in heart tissue was significant (p<0.05). However, these three factors had no interaction effect on heart MDA levels (F=3.98, p>0.05). Effect of gender (F=11.28) and  $CoQ_{10}$  supplementation (F=34.48) on the heart protein carbonyls (PC) level was found to be important (p<0.05). There were significant interaction effects for gender, exhaustive exercise and  $CoQ_{10}$  supplementation for heart PC level (F=9.59, p<0.05), however there was no significant interaction or main effects for heart total glutathione (GSH) levels (F=0.37, p>0.05).

**Conclusion:** According to the findings of this study,  $CoQ_{10}$  supplementation reduced lipid and protein damage in heart tissue, besides  $CoQ_{10}$  supplementation in females compared to males can be said to be more effective in preventing protein damage.

**Keywords: Oxidative Stress, Coenzyme Q10** 

<sup>&</sup>lt;sup>1</sup> Selçuk University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Selçuk University Faculty of Medicine

### PP. 3 EARLY CHILDHOOD EDUCATION MAJORS' PERCEPTIONS ON PHYSICAL EDUCATION

#### <u>Irmak Hürmeriç Altunsöz</u><sup>1</sup>

<sup>1</sup> Middle East Technical University Physical Education and Sports Department

#### **Abstract**

Objective: Early childhood physical education is an ideal school subject to promote motor skill development of children and lifetime physical activity participation (Stork& Sanders, 2008). If young children develop healthy habits during their childhood period, children have chance to carry these habits through their adulthood period (Vidoni & Ignico, 2011). Therefore, early childhood educators need to know specific content knowledge and pedagogical skills to teach physical education for their students. Furthermore, they need to be aware of the importance of physical education for children's daily life and they need to recognize the role of movement and physical activity for healthy generations (Pica, 2011). Having positive perceptions on physical education, early childhood educators may willingly to prepare their physical education classes in a developmentally appropriate way to teach fundamental motor skills or physical activities which are the stepping stones for a healthy lifestyle. Based on this premise, early childhood majors' perceptions about physical education after a 14 week physical education course were investigated in this study.

**Methods:** Participants of this study were 2nd year undergraduate students (Mage= 21.73) from the early childhood education department. Fifty one (45 Female, 6 Male) early childhood education majors were enrolled physical education and games course and 49 students voluntarily answered specific open ended questions related to the early childhood physical education at the end of the course. The questions were asked the students to describe a) the meaning of physical education in early childhood period, b) the role of physical education in children's health, c) the concepts of early childhood physical education and d) teaching physical education for young children.

**Results**: Content analysis was performed for the responses of the participants. Two independent researchers analyze the participants' responses to develop coding categories through the searching for words, phrases or repeated ideas in the sentences (Bogdan & Biklen, 2003). Content analysis of the open ended questions showed two main themes: a) health perspectives and b) teaching perspectives of students. Health perspectives of students included the following sub-themes: a) developmental areas and b) health and fitness. Teaching perspectives of students included the following sub-themes; a) physical activity and motor skills, b) social skills, c) body and space awareness, d) knowledge on physical activity and health, e) curriculum subject, and f) others.

Conclusions: Early childhood education majors emphasized that children's involvement in physical education played a vital role for growth and development of children. According to the students, developmental areas of children were easily supported in physical education classes. In addition, physical education is seen as a vital curriculum subject to educate children for an active lifestyle and healthy life. The majority of students also expressed that necessary knowledge and skills on health related fitness components such as flexibility, muscle strength or endurance were needed to teach for young children in physical education. Early childhood education majors also indicated that developmentally appropriate activities and movements are necessary to arrange for young children. Specifically, high number of students stressed that fundamental motor skills, sport specific skills, balance activities and aerobics activities are the basis of the physical education. As a conclusion, early childhood educators are responsible for implementing physical education or movement programs at their school settings, they need to have necessary knowledge; skills and positive attitudes toward physical education to better organize PE or movement programs for young generations.

Keywords: Physical Education, Early Childhood Majors, Perceptions

# PP. 14 YÜZÜNCÜ YIL UNIVERSITY A STUDY ON THE RELATIONSHIP BETWEEN ATTENTION DEFICIT HYPERACTIVITY DISORDER AND THE ACADEMIC SUCCESS AND SOME PARAMETERS OF THE STUDENTS OF THE PHYSICAL EDUCATION SPORTS TEACHERS DEPARTMENT

Mustafa Atli<sup>1</sup>, Gökhan Yaşar <sup>2</sup>

#### **Abstract**

**Objective:** The purpose of this study is to find out whether the impact of the symptoms of attention deficit hyperactivity disorder of the students of the department mentioned above by examining the relationship between their academic achievement and some parameters such as gender, age, body weight, grade level and personality information.

**Methods:** 200 volunteer students, who are randomly selected of the department, are involved in the study. Therefore 200 questionnaires applied to these students have been evaluated. Adult Attention-Deficit/Hyperactivity Disorder (Adult ADHD-ASRS-v1.1) questionnaire which is developed by World Health Organisation and Turkish adaptation with its reliability and validity of which is brought in by the Assistant Professor Sultan Doğan has been used in order to diagnose the possibility of the attention-deficit hyperactivity disorder symptoms of the students of the Department of Physical Training and Sporting. Furthermore Personality Information Form was used in this research. For the analysis of the data obtained from the study "spss 15-0" package programme and the "t-test, one-way analysis of variance (ANOVA), correlation" test techniques have been used.

**Results:** When the opinions of the students related to Attention-Deficit/Hyperactivity Disorder frequency, percentage and arithmetic mean values are taken into consideration the difference is not statistically significant. The possibility of high Attention-Deficit/Hyperactivity Disorder symptoms of the students is clearly brought out. In the examination of some demographic variables academic success makes the difference in height, weight, age while the research in the test related to the symptoms of Attention-Deficit/Hyperactivity Disorder and some of the demographic variables e.g. gender, age, weight, grade level and some of the personal information have been noticed that any significant difference cannot be evaluated.

**Conclusions:** It has been observed that the students of BESÖ have significant symptoms of DEHB and the possibility of DEHB. It is recomended that the educational institutes and the teachers take into account the conditions of the students having DEHB when planning the curriculum of the schools.

Keywords: Physical Education and Sports, Attention-Deficit/hyperactivity Disorder, academic Success

## PP. 23 EXAMINATION OF PRIVATE AND PUBLIC MIDDLE SCHOOL STUDENTS' OPINIONS ABOUT PHYSICAL EDUCATION COURSES: A CONSTRUCTIVIST TEACHING PRACTICES STUDY

Bülent Ağbuğa<sup>1</sup>, Sinem Kadem <sup>1</sup>, Çağdaş Mavioğlu <sup>1</sup>

#### Abstract

**Objective:** The purpose of this study is to examine students' opinions about the Constructivist Teaching Practices in private and public middle school physical education including Personal Relevance, Social Cooperation, and Games/Skills subscales.

**Methods:** Participants consisted of 160 students in private schools and 160 students in public schools (158 female ve 162 male) and totally 320 middle school students in the central district of Denizli. They completed a 25-item, 5-point Likert scale "The Turkish version of the Constructivist Teaching

<sup>&</sup>lt;sup>1</sup> Yüzüncü Yıl University School of Physical Education and Sport

<sup>&</sup>lt;sup>2</sup> Ministry of National Education Physical Education Teacher

<sup>&</sup>lt;sup>1</sup> Pamukkale University School of Sport Science and Technology

Practices Inventory in Elementary Physical Education" [CTPI-EPE] developed by Chen, Burry-Stock ve Rovegno (2000) and adapted to Turkish by Ağbuğa (2013).

**Results:** Results of this study revealed that both male and female teachers use Constructivist Teaching Practices in their physical education classes (for Social Cooperation subscale Mprivate = 4.221, Sd = .508; Mpublic = 2.853, Sd = .621; for Personal Relevance subscale Mprivate = 4.227, Sd = .409; Mpublic = 2.815, Sd = .522); and for games/skills (Mprivate = 4.274, Sd = .450; Mpublic = 2.854, Sd = .613). In addition, there are statistically differences within these three subscales (for Social Cooperation subscale [t(305,980) = -21.572, p = .000], for Personal Relevance subscale [t(300,690) = -26.910, p = .000] and for games/skills "[t(291,837) = -23.580, p = .000], respectively).

**Conclusions:** Through the eyes of students, this study found that private middle school physical education teachers use the constructivist teaching method in their courses more than public middle school physical education teachers do. Found this difference, not only physical education teachers should be more sensitive using the constructivist approach in public schools but also existing physical conditions of public schools (gymnasium, sports equipment, etc.) should be improved.

Keywords: Physical Education, Constructive Teaching Approach, Private and Public Schools

### PP. 32 INTERPERSONAL COGNITIVE DISTORTIONS LEVELS OF THE PHYSICAL EDUCATION PRE-SERVICE TEACHERS

Filiz Yaylacı<sup>1</sup>, Mert Çevik <sup>1</sup>

#### **Abstract**

**Objective:** The purpose of this study, of physical education pre-service teachers is to determine the level of cognitive distortions about relationships.

**Methods:** Descriptive survey method was used in the study. This research who studies physical education departments at 132 students participated. In this study, the Interpersonal Cognitive Distortions Scale (Hamamcı ve Büyüköztürk, 2003) were used. Aritmetic mean, standart deviation have been used in data analysis, t test in double data comparisons and one way variance analysis (Anova) in multiple comparissons. Surveyed individuals taken from the scale mean scores  $58.68 \pm 10$  complaints / avoidance dimension  $23 \pm 5$ , unrealistic relationship expectations lower size  $25 \pm 5$ , and mind-reading sub-dimension of  $10 \pm 2$  respectively.

**Results:** According to the findings obtained from the study of non-cognitive distortions rate of 1.5%; much less than 43.2%; 51.5% and 3.8%, much larger part was found. The research the people who involved in the scale and the scale of the sub-dimensions to their scores by gender, age group, is interested in sports, mother and father's educational status and economic conditions not found significantly (p> 0.05). By grade level and scale of some sub-dimensions (complaints / evasions, unrealistic relationship expectations) a significant difference between the scores was found significant (p <0.05).

**Conclusions:** As a results this study shows, preservice teachers at graduation, a significant decrease in the levels of interpersonel cognitive distortions relations were determined.

Keywords: Physical Education, Pre-Service Teachers, Interpersonal Cognitive Distortions

### PP. 35 EXAMINING PRE-SERVICE PHYSICAL EDUCATION TEACHERS' SATISFACTION: VOCATIONAL PERSONALITY APPROACH

#### Ahmet Haktan Sivrikaya<sup>1</sup>

#### Abstract

**Objective:** The main purpose of the current study was to examine the role of vocational personality in

<sup>&</sup>lt;sup>1</sup> Akdeniz University School of Physical Education and Sport

<sup>&</sup>lt;sup>1</sup> Balıkesir University School of Physical Education and Sports

physical education pre-service teachers' satisfaction and academic performance.

**Methods:** The participants included 113 pre-service physical education teachers (36 female, 77 male) enrolled in the department of physical education at Balikesir University, Turkey. Forty-one participants were freshmen, 23 sophomores, 20 juniors, and 29 seniors. The participants were asked to complete a survey during a regular class session. Participation was voluntary. The researcher explained the purpose and significance of the study to the participants. Those willing to participate filled out the research instrument. The response rate was 80%. The Vocational Personality Scale used in the current study in light of Holland's theory and Self-Directed Search (Holland, 1994). The instrument has 30 items with 5 items for each personality type. Some of the items were "using mechanical tools" (realistic), "trying to understand a scientific theory" (investigative), "working with gifted authors, musicians or sculptors" (artistic), "helping others in difficulty" (social), "leading a group" (enterprising), "checking paperwork or products for errors" (conventional). The participants were asked to indicate their response on a 6-point Likert-type scale ranging from 0 (I am not interested in it at all) to 5 (I am interested in it very much). Scores on each type ranged from 0 to 25 with higher scores indicating higher reflection of personality in the respective type. Data for the current study was collected through a survey which consists of three sections. The first section of the survey was designed to gather the participants' demographic information. The second section was intended to measure their satisfaction with studying in the department of physical education. The third section consisted of a scale in which the participants indicated their level of interests for 30 different types of vocational activities.

**Results:** Cronbach's alpha coefficient for the interests scale was found to be 82. The subscale coefficient values were .76 for Realistic, .71 for Investigative, .72 for Artistic, .78 for Social, .73 for Enterprising, and .80 for Conventional. These findings indicated a fairly high internal consistency for the overall scale and its associated subscales. In this study the participants' highest score was social (M = 4.30, SD = .58) and lowest score was enterprising (M = 3.05, SD = .71). The pre-service physical education students' departmental satisfaction ranged from 3 to 6 with a mean of 5.44 (SD= .80). 60% of the students chose the face that corresponds to the maximum score of 6 points. Their academic performance ranged from .71 to 3.69 with a mean of 2.59 (SD = .44). There was no statistically significant difference between male and female p-service teachers in the other dimensions of personality. Performance as measured by the students' overall Grade Point Average (GPA) was found to be significantly correlated with Investigative, Conventional personality types and department entrance exam scores. Academic performance was found to be moderately correlated with the investigative and conventional type scores and department entrance exam scores.

**Conclusions:** Based on these results, the department of physical education seems to be an ideal department for those possessing social and conventional personality types.

**Keywords: Physical Education, Vocational Choice, Holland's Theory, Personality, Departmental Satisfaction** 

### PP. 71 THE COMPARISON OF ASSERTIVENESS LEVEL OF PHYSICALLY DISABLED ATHLETES WHO PLAYED IN DIFFERENT SPORT BRANCHES

#### Gonca İnce<sup>1</sup>

#### Abstract

**Objective:** In this study was aimed the comparison of assertiveness level of physically disabled athletes who played in different sport branches.

**Methods:** In this study was participated 60 physically disabled athletes (36 male (60%) and 24 female (40%) from Atlas and Genç Physically Disabled Sport Clubs in Adana voluntarily. The mean age of the physically disabled athletes was found to be 19.73±5.08 years. The mean of sports year 2.48±1.75. Sport statues (The mean of per week number of day: 3.63±1.52, and the mean of per day number of time: 2.91±1.53hour). In this study, two different branches were evaluated (athletics (35 persons,

<sup>&</sup>lt;sup>1</sup> Çukurova University School of Physical Education and Sport

58.3%) ve swimming (25 persons, 41.7%). Rathus Assertiveness Schedule was used for evaluating assertiveness and questionnaire of athletes profile was performed to investigate for demographic characteristics of physically disabled athletes by researcher. For statistical analyses, the SPSS 11.5 computer packet program (frequency, mean, standard deviation ve independent-samples t-test) was performed.

**Results:** As a result of the study, it is possible to say that; no association was detected between branches (athletics and swimming) and assetiveness in physically disabled athletes (p>0.05). But, the mean of assetiveness scores was found 104,60±8,24 in all branches. This score was shown modarete level (80-130 score) of assetiveness according to the Rathus Assertiveness Schedule.

**Conclusions:** Consequently; we can emphasize that deal with a sport can be contribute to be assetiveness for physically disabled athletes in their life.

Keywords: Assetiveness, Sport, Physically Disabled Athlete, Athletics, Swimming

### PP. 72 A STUDY ON SPORTSPERSONSHIP BEHAVIOR OF HIGH SCHOOL STUDENTS IN PHYSICAL EDUCATION COURSE ACCORDING TO SOME VARIABLES

Yakup Koç<sup>1</sup>, Mehmet Güllü<sup>2</sup>

<sup>1</sup> Erzincan University Faculty of Education

#### **Abstract**

**Objective:** Physical education course satisfies most of the need for sportive activities of students. Therefore, it is of great importance to help students acquire sportspersonship behavior in physical education course. Before they acquire such behavior, they need to be examined according to some features of students. The aim of this study is to examine sportspersonship behavior of high school students in physical education course according to some variables.

**Methods:** The sample of study consists of randomly selected 550 students attending state schools in the province of Erzincan in 2013-2014 academic year (250 female and 300 male students). "Physical Education Course Sportspersonship Behavior Scale" (PECSBS) developed by Koç (2013) for elementary school students and "Aggression Inventory" developed by Kiper (1984) were used in the study. Reliability and validity tests of the scales were done. The scores the students obtained in the scales were reexamined in accordance with their gender, socio-economic-family situation, success level at school and the type of sports they are interested in most. The relationship between the values of sportspersonship and those obtained in aggression inventory was tested. The data collected were analyzed through Mann Whitney U test, Anova, Tukey and Pearson Correlation tests. For the assessment of the data, SPSS 15 and LISREL 8,7 programs were employed.

**Results:** In the exploratory factor analysis of PECSBS for high school students (n= 550), KMO value was found to be .86 and Bartlett Test was significant (p < .001). The total variance that "Avoidance from inappropriate behavior (AIB)" factor with 11 items and "Exposition of Appropriate Behavior (EAB)" factor with 11 items accounted for was found to be 39.25 %. Item-total correlation values of the scale ranged between .25 and .60. Internal consistency reliability of the scale was .86 according to Cronbach Alpha analysis. The total score obtained in the scale was assessed as "Total Sportspersonship" (TS). In the exploratory factor analysis for Aggression Inventory, subscale items of passive and disruptive aggression inventory focused on single factor with 15 items accounting for 36.46 % of the variance (2, 3, 8, 18 and 27<sup>th</sup> items were excluded). This was named as aggression subscale. In addition, in the factor analysis for assertiveness subscale, the scale focused on the single factor with 9 items accounting for 31.95 % of the total variance (6<sup>th</sup> item excluded). Internal consistency reliability for aggression and assertiveness subscales was measured through Cronbach Alpha as .87 and .73 respectively. Significant differences were observed in students' AIB, TS and Aggression values considering their gender and the type of sports mostly interested (P<0.05). Female students compared to male ones were found to be less aggressive and more sportsperson. In

<sup>&</sup>lt;sup>2</sup> İnönü University School of Physical Education and Sports

addition, the students that are interested more in team sports that do not require physical interaction showed more behavior of sportspersonship and turned out to be less aggressive than those interested in other types of sports. No significant difference was seen in sportspersonship behavior of students taking into consideration their success at school (P>0.05). Nevertheless, significant differences were seen in their aggression level (P<0.05). The students regarding their success level at school as better were found to be less aggressive compared to other students. No significant difference was observed in sportspersonship and aggression values with regard to students' families economic level (P>0.05). While negative relationship was found between sportspersonship behavior (AIB, EAB and TS), of female and male students in physical education course and their aggression values (P<0.05), a positive relation between assertiveness values and EAB values of only male students was seen (P<0.05).

**Conclusions:** In the light of the data, sportspersonship behavior in physical education course varied depending on the gender and the type of sports the students were interested in. Besides, negative but important relationship was observed between sportspersonship behavior of students in physical education course and aggression values. Researchers are strongly suggested to take into account these results in planning sportspersonship practices in physical education course and study that sportspersonship behavior in physical education course has a relation with different personalities.

Keywords: Physical Education Course, Sportspersonship Behavior, Aggression

### PP. 128 EXAMINATION OF PHYSICAL EDUCATION TEACHER CANDIDATE'S ATTITUDES TOWARDS RESEARCHES

Yaprak Kalemoğlu Varol<sup>1</sup>, Hüseyin Ünlü<sup>1</sup>, Mustafa Kayıhan Erbaş<sup>1</sup>

#### **Abstract**

**Objective:** In this study it is aimed to determine attitudes of candidates of physical education teachers' towards researches, examination of the issue with regards to gender and class variables and comparison of teacher candidates from faculty of education and physical education teacher candidates in terms of their attitudes towards researches.

**Methods:** Research was conducted as a scanning model. Research group is formed of total 301 candidates of teacher of which 168 was female (56%) and 133 was male (44%) participants( $M_{\rm age}$ =21.565, Ss=3.790). 146 participants of the research group (N<sub>female</sub>=58, N<sub>male</sub>=88) were physical education teacher candidates and 155 participants were educational faculty teacher candidates. As the tool of data gathering; Likert type "Research Attitude Scale" formed of 31 articles and 5 sub dimensions [(a) Interest, (b) Importance, (c) Motivation, (d) Utility, (e) Anxiety] was used. Internal consistency coefficient of the scale was re-calculated for this research and Cronbach Alfa value as total of the scale was calculated as .86. In data analysis, t-test of mathematical averages, single directional variance analysis and descriptive statistical methods were used for independent groups.

**Results:** It has been observed that an attitude of physical education teacher candidates towards research was at medium level ( $M_{\rm attitude}$ =110.219, Ss=17.378). In addition, significant difference in terms of gender variable was found in "interest" sub dimension and no significant difference was found for other sub dimensions. It was determined that there were significant differences in terms of class variable both in all 5 sub dimensions and in entire scale. Significant difference in attitude level towards research was found with regards to variable of department where teacher candidates are educated.

**Conclusions:** As a result it is concluded that attitudes of physical education teacher candidates towards scientific research were not at desirable level moreover female teacher candidates had more affirmative attitudes towards research compared to male candidates. From the perspective of class variable; it was found that physical education teacher candidates of 3<sup>rd</sup> class had higher affirmative attitude towards research compared to other classes. Furthermore, it was observed that attitudes of

<sup>&</sup>lt;sup>1</sup> Aksaray University School of Physical Education and Sports

teacher candidates from educational faculty towards researches were higher compared to physical education teacher candidates.

Keywords: Attitude, Physical Education, Research Attitude

### PP. 129 BASIC PERSONALITY CHARACTERISTICS OF PHYSICAL EDUCATION TEACHERS

Mustafa Kayıhan Erbaş<sup>1</sup>, Hüseyin Ünlü <sup>1</sup>, Yaprak Kalemoğlu Varol <sup>1</sup>

#### **Abstract**

**Objective:** In this study, it is aimed to determine basic personal characteristics of physical education teachers and examination in terms of gender, professional seniority and sports branches variables.

**Methods:** Research was conducted as a scanning model. Research group is formed of 95 physical education teachers of which 31 (33%) were female teachers and 64 (67%) were male teachers ( $M_{\rm age}$ = 32.252, Ss= 4.771). As method of gathering data; personal information form was used to describe gender, chronological age, professional seniority and sports branch and "Basic Personality Traits Inventory" developed in Turkish Culture was used to determine personal characteristics. Scale is Likert type of 5 and formed of 45 articles and 6 sub dimensions [(a) Extrovertion, (b) Conscientiousness, (c) Agreeableness, (d) Neuroticism, (e) Openness for experience, (f) Negative valence]. Internal consistency coefficient of scale was re-calculated for this example and Cronbach Alfa value of entire scale was found to be .70 for entire scale. In data analysis, t-test of mathematical averages, single directional variance analysis and descriptive statistical methods were used for independent groups.

**Results:** According to mathematical averages of sub dimensions of personal characteristics of physical education teachers it is observed that extroversion (M= 31.926, Ss= 9.171) and responsibility (M= 30.252, Ss= 5.117) sub dimensions have the highest and negative values dimension (M= 13.210, Ss= 6.904) has the lowest average values. From the perspective of gender variable about basic personality characteristics; significant difference was not found between mathematical averages in t-test results of independent groups. According to sports branch variable of basic personality characteristics; significant differences were found between mathematical averages in t-test results of independent groups. In terms of professional seniority variable of basic personality characteristics; no significant differences were found in single directional variance analysis.

**Conclusions:** As a result, it was observed that physical education teachers are extrovert and responsible people in general. Moreover, it is found that physical education teachers with experience in team sports are more compatible and adaptable compared to physical education teachers with experience in individual sports and in addition negative values characteristics of physical education teachers with experience in individual sports were higher than those of physical education teachers with experience in team sports.

Keywords: Physical Education, Personality Characteristcs, Physical Education Teacher

<sup>&</sup>lt;sup>1</sup> Aksaray University School of Physical Education and Sports

## PP. 136 THE VIEWS OF PHYSICAL EDUCATION TEACHERS' ABOUT TRAINING PROGRAMS OF 4TH AND 5TH CLASS STUDENTS IN PRIMARY EDUCATION. (A SAMPLE OF KARS, ARDAHAN AND IĞDIR)

<u>Tarkan Havadar</u><sup>1</sup>, Murat Taşdan <sup>2</sup>

#### **Abstract**

While the importance of education increases in the world, "the concept of knowledge" and "the conception of knowledge" change rapidly. It is obvious that, the improvements which starts the constitution of information society has impacts on information society as an accelerative force on economical development process, curative effect on serviny the social substructure services and an increasing effect on cultural interaction. Nowaday, education is the most important elemet of economical and social development in whole of the world and changes rapidly and continvously. All of the developed countries, recently started a strong reform studies on education intersivly. In expressing the guality of an education institute, the programs which are being applied there and the other executive arrangement shave greater importance. The new primary school education which has been started in 2006-2007 educiation year and which includes providing the students to participate in the practices by constructing and living in means of configurative approach, brought up new discussions with itself. Of this account, this study includes the evaluation of configurative programs in tems of physical education course by physical education teachers and games masters, try to Express the problems of the lecturers which they and try to find solutions to these problems. According to the lecturers opinions who work in Kars, Ardahan and Iğdır, as to reach this bayic aim, it has been tried to find answers to these sub-guestions: What are the main problems in terms of taarget and advanteges? What showld be done for the solutions of these problems? What are the problems in terms of thame? What showld be done for the solutions of these problems? What are the problems in terms of learing and teaching process? What showld be done for the solutions of these problems? What are the problems in terms of measurement and evaluation? What showld be done for the solutions of these problems? Is there any significant difference in all these sub-guestions in terms of the lecturers opinions, demograpgic, seniority, educattion level and the place where he/she Works? The phase of this research consist of 165 physical education teachers and game masters. Who work in primary schools in Kars, Ardahan and Iğdır. The questionnaries and interview forms were given to the teachers in meetings which have been held in the city and also by visiting then in their schools in total questionnaries were given to 150 physical education teachers and interview forms were also given to the 25 physical education teachers 140 questionnaries and 20 interview forms were recycled. Quantitative data of reseach were analized by using percentage, frequency and mean and Standard deviation. The data collected were analized by analysis of the content.

Keywords: Physical Education, Physical Education Teacher, Physical Education and Sport, The New Curriculum, Physical Education and Sport Program

### PP. 183 CLUSTER ANALYSIS AND EVALUATION OF TEACHING METHODS USED BY SPORTS EDUCATORS (THE CASE OF THE PROVINCE OF ELAZIG)

 $\underline{\text{Talha Murathan}}^1$ , Oktay Kaya $^2$ , Fatih Murathan $^3$ 

#### Abstract

In this study, with physical education teacher, demographic and profession qualities of trainers were

<sup>&</sup>lt;sup>1</sup> Kafkas University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Kafkas University Faculty of Education Sciences

<sup>&</sup>lt;sup>1</sup> Ardahan University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Fırat University School of Physical Education and Sports

<sup>&</sup>lt;sup>3</sup> Adıyaman University School of Physical Education and Sports

studied and it was wanted to search if there was any difference in this occupation groups according to education methods. To determine these differences "Survey Method" was carried out. Sport educators constituted the sampling group the universe of investigation and, 178 physical education teachers and 243 trainers that worked actively in Elazığ in 2010-2011 formed. In this study, sport educators were classified in to groups and then it was studied to determine whether there was any meaningful level between demographic distribution of sport educators according to occupation and other variables. Also, in this study, with the aim of determining the clustering tendencies of sport educators according to their education methods, the methods they used were tried to explain. Also, to determine variable cluster in which they took part in, 2 gradual method, a method of Clustering analysis method, was chosen and then Bayesian criteria of Schwarz (BIC) was chosen as a Clustering Criteria. The distribution of sport education that took part in this study was compared with one of the Clustering Analysis, "K-means cluster" K- averaged Cluster analysis. Also, with Tree Method, the subgroups of distribution showed by the sport educators of this group was identified with Clustering analyzing, the method of CHAID and QUEST, and then the relationship among clustering was analyzed. In statistic evaluation, SPSS 17.0 package programme was used and the meaningful datas were showed in tables and graphics. As a result, education methods were used widely by sport educators and were identified, then clustering classes of occupation groups were determined. Also it was determined that; the education methods used by sport educators showed meaningful differences with respect to occupation, age and education level.

Keywords: Sport Educator, Education Method, Classifying Cluster Analysis

### PP. 205 THE OPINIONS OF PHYSICAL EDUCATION TEACHER CANDIDATES ABOUT MID-TERM AND FINAL EXAMINATIONS

Başak Eroğlu<sup>1</sup>, Tülay Keser<sup>1</sup>, Arif Kaan Eroğlu<sup>2</sup>

<sup>1</sup> Yüzüncü Yıl University School of Physical Education and Sports

#### Abstract

**Objective:** The purpose of this study is to investigate the opinions of physical education teacher candidates about mid-term and final examinations.

**Methods:** Two hundred teacher candidates who are receiving education in the physical education and sport department in 2013-2014 compose the universe of this study. A hundred and fifty student was taken as sampling in this universe. At this study in survey mode, I questionnaire has been used for determination of situation used. The data of the investigation has been collected with a scale that contained 19 questions. The scale is developed, and ensured validity and reliability for the opinion determination of the students about examinations by Demir (2012). In the analysis of the data, basic frequency has been examined by using SPSS software and chi-square test has been used.

**Results**: According to the statistical results of this study, it has been come up that the teacher candidates have been mostly subjected to written exam, but more prefer to have multiple choice tests and practical exams. 30-35 minute exam period was found suitable by teacher candidates. The reason of failure in exams is to study insufficiently according to the teacher candidates' opinions. They consider that exams try to determine how much students study for the exam. They begin to prepare for the exams a few days before the exam dates. They consider the questions are mostly comprehensible. The instructions of the exam are sufficient and exams generally evaluate the efficiency of teacher candidates according to their opinions.

There is significant differences between teacher candidates who have played in national sport teams and who have not in term of the kind of test they prefer most (p<0.05). Furthermore, their opinions about whether exams determine their professional competence change significantly between classes (p<0.05).

**Conclusions:** The results of this investigation show that the assessment and expectation on the exams of teacher candidates change during educational process. It is important that the factors that affect this

<sup>&</sup>lt;sup>2</sup> Gazi University School of Physical Education and Sports

change must be known and these factors should be used by instructors in order to contribute to the measurement and assessment process.

Keywords: Physical Education Teacher Candidates, Midterm Examination, Final Examination, Students' Opinion.

### PP. 231 EXPECTATIONS OF FAMILIES WHO SENT THEIR CHILDREN TO THE SPORT SCHOOLS (EXAMPLE IN MANISA CITY CENTRE)

Diyar Kaya<sup>1</sup>, Hüseyin Çamlıyer <sup>1</sup>, Mümine Soytürk <sup>1</sup>

#### Abstract

**Objective:** The aim of the study is to determine the expectations of families who sent their children to the sport schools in Manisa city centre.

Methods: The scope of our study consitute 3214 parents who sent their children to the sport school in Manisa city centre. The sample of the our study consist of 300 parents who were at the the sport school while their children were practice. Avarage age of the children is 8.8. (Age range is 4-12). As means of collecting data, Personal Information Form and survey was used. Research data, descriptive statistics, cross-table relationships between dependent and independent variables were examined. (In our research, Independent T Test and Mann Witney U Test were used for the two independent groups which show statistically normal distribution. Kruksal Wallis test was used for the avarage difference between the independent groups which are more than two. To examine the relations between the two groups, Pearson Corelation Test was used.) Our research group mean difference of two independent normal distribution with Independent T Test and Mann-Whitney U test was used. Normal distribution does not present of the difference between more than two independent groups, the Kruskal-Wallis tests were used. To examine the relationship between the two groups Pearson corelation test was used in our study.

**Results:** A meaningful relation wasn't found when the expactations of the families' from the sports schools are examined. They want their children to play in the school and club teams, to be interested in sports individually, to make use of the time well, and to do sports professionally (p>0.05). There is no meaningful relation between the expectations level of the families for their children to participate in the sports activities (p>0.05). When we look at the parents' priority ranking for the activities which their children participate, as a top priority they want their trainers to be educated. The opinions of the parents for the sports areas which their children can use are that 47.3% say that their children play in school gardens, 16.7% of them say they play in open sports areas, 8.7% of them say that there are sports complex, and 27.3% say that there is no sports area. There is a statistically significant relationship according to the educatonal level of the parents between the age of the children p<0.05.) There is a significant relation between the education level of the father and the number of years which the children attended the sports schools (p> 0.05). There isn't a significant relation between the education level of the father and the number of years which the children attended the sports schools and the age of the children (p> 0.05). The child's participation level to sporting activities is analyzed according to maternal or parental factors (p> 0.05) was not a significant relationship. When % values were analyzed, families future expectation from their children are %48 professional rate. When looking at the subjects which are talked about between families and child's sport teachers are state that %42,7 child's development, %41,7 child's ability.

**Conclusion:** In conclusion, when we think that children should do sports not to become a successful person in sports, but to have a lifestyle which is healthy and active, the current situation shows the concerns that it will affect our social future negatively in terms of the dynamic generations.

Keywords: Sport and Children, Sport Culture, Sports Schools, Parents Expectations

<sup>&</sup>lt;sup>1</sup> Celal Bayar University School of Physical Education and Sports

### PP. 335 DETERMINING PHYSICAL EDUCATION TEACHERS' VIEWS ABOUT STUDENT MISBEHAVIORS IN PHYSICAL EDUCATION LESSONS

Anıl Onur Mercanoğlu<sup>1</sup>, Kerem Yıldırım Şimşek <sup>1</sup>

#### **Abstract**

**Objective:** The aim of the research is to appoint the physical education teachers' views who work at schools in Yenimahalle district in Ankara about student misbehaviors in physical education lessons.

Methods: The research group comprises of 100 physical education teachers in total who was chosen with convenience sampling method and work at public schools in Yenimahalle district in 2011-2012 school year. 'A questionnaire determining the views about student misbehaviors in class' that Nükhet Sayın (2001) developed in four point likert type was applied to the physical education teachers who work at school. The questionnaire composes of three parts; however, just one part of it was used and the items that is not relevant to physical education lessons were removed by benefiting from expert views. With the title 'The student misbehaviors in class' of the questionnaire, there is a scale with 28 items which are about the misbehaviors that physical education teachers may encounter in class environment. Within this part of the questionnaire, with the aim of determining the frequency of student misbehaviors that physical education teachers meet, four point likert rating system was applied and the items were rated like 'never', 'seldom', 'usually', 'always'.

**Results:** When the data that was collected was evaluated, for the part 'student misbehaviors in physical education lessons', it was determined that the behavior 'complaining about a friend to the teacher' is always seen at the rate of 37%, the behavior 'avoiding from the class duties that the teacher gives' is usually seen at the rate of 47%, the behavior 'being late for the class' is usually seen at the rate of 62%, 'making unnecessary noise' is usually seen at the rate of 68%, 'speaking in class without permission' is usually seen at the rate of 72%, 'behaving disrespectfully to the teacher' is seldom seen at the rate of 60%, 'not coming to school without any effective excuse' is seldom seen at the rate of 64%, 'walking around the class aimlessly' is seldom seen at the rate of 64%, 'damaging to their friends' properties' is seldom seen 76%, 'beating and pushing' is seldom seen at the rate of 65%, 'complaining about their friends to the teacher' is never seen at the rate of 20%, 'singing and whistling in the lesson' is never seen at the rate of 36%, 'eating and drinking during the lesson' is never seen at the rate of 20%.

**Conclusions:** According to the findings that were obtained, it was appeared that the most often behavior that the physical education teachers in research group meet is 'complaining about a friend to the teacher'; the behavior that they usually meet is 'speaking without permission'; the behavior that they seldom meet is 'damaging to their friends' properties'; the behavior that they never meet is 'singing and whistling in class'.

Keywords: Physical Education, Misbehavior, Classroom Management

#### PP. 379 SHERBORNE DEVELOPMENTAL MOVEMENT

#### Ayşegül Aksoy<sup>1</sup>

#### Abstract

**Objective:** Sherborne Developmental Movement (SDM) is a method of training social and motor skills was developed by Veronica Sherborne (1922 - 1990) and it is based on the theory of movement analysis by Rudolf Laban. This method was developed first for the needs of children and adults with intellectual disabilities, but because of its variability and possibilities for adaptation it is widely used in general and special education in schools and kindergartens and also for adult and elderly people.

**Methods:** This approach based on the philosophy and theory created by Rudolf Laban (Pioneer and founder of Modern European Dance and movement analysis) was devised by Veronica Sherborne after

<sup>&</sup>lt;sup>1</sup> Anadolu University Faculty of Sport Sciences

<sup>&</sup>lt;sup>1</sup> Gedik University Faculty of Sport Sciences

having worked closely with Laban for two years. Her approach to teaching movement is firmly rooted in both observation of how children play in the normal course of their development and then grounding these observations in the philosophy and theory of Laban's Movement Analysis (LMA). The LMA is divided in three main parts; in which direction in the space the body is moving; backwards-forwards, high-low or sideways, constituting the dimensional scale, without the awareness of the body this part becomes meaningless. What part of the body is moving; in a successive way or simultaneously, is it moving coordinated as whole or is the movement confined to extremities. In what way the body is moving; the most important part consisting of motion factors energy, flow, space and time (Sherborne,1990). An awareness of the basic principles of both LMA and SDM reveals how much Sherborne and Laban's work as the foundation for her own. Yet, Veronica Sherborne says "... teachers of movement need to be aware of what parts of the body are moving, in which direction in space they are moving and, most important, how is the body moving?". When planning a balanced movement session, we need to ask ourselves "what part of the body is moving (body awareness)?", "where is the body moving(spatial awareness)?", "In what interactive context is the person moving(relationships)?", and "how is the body moving(movement quality)?" while following factors need to be taken into account; observation and assessment, communication, the content and length of a session, how to start and finish a session, and safety. Nevertheless, each session should contain experiences that focus on the main elements of SDM; body awareness, spatial awareness and relationships, the facility to experience varying movement qualities and the opportunity for creativity. Results: The SDM includes training of basic motor skills, which enable learning complicated motor skills. In the beginning the child trains the basic skills, simple single movements. The exercise becomes more and more difficult according the development of his/her skills. Method of teaching, goals and exercises are modified according to the needs of the group or the individual. The exercises are built as a progressive system starting from the senses and moving up towards interaction exercises. Additionally, SDM is a very reflective session and SDM leader must be a very active observer during the session to be able to follow the individual needs of participants.

**Conclusion:** Through Sherborne's movement experiences, we are able to explore feelings and reactions which can contribute towards our assessment of self and others, and conversely their feelings towards us. The SDM offers a positive experience which based on the development of trust and confidence in self and others, with encouraging creativity, while it is person centred, shared experience which is enjoyable and fun.

Keywords: Sherborne Developmental Movement, Laban, Disability

### PP. 386 INVESTIGATION OF THE ATTITUDES OF THE SPORTS HIGH SCHOOL STUDENTS TOWARD THE TEACHING PROFESSION

Serkan Hacıcaferoğlu $^1$ , Mehmet Hasan Selçuk $^2$ 

#### Abstract

It will be possible for the societies to be capable of surviving against the rapid change in the world, by upbringing qualified individuals. The most important task in the upbringing of qualified individuals belongs to the education and it becomes necessary to develop the education in parallel with the developments as well. It is necessary to increase spending on education, to reorganize, evaluate and develop the programs and to develop the educational tools and materials in order to improve the education. However, having all of these items effectively used in accordance with the purpose be successful, depends on the quality of teachers who are active practitioners of the system. Unless the development and the change of the teachers, who are the main determinants of the education systems, are not being provided, changes made will not be sufficient. The success of any school and even of the entire education system depends most of all on the teachers' applications (Külahçı, 1992). In other words, good teachers are need for good students (Seferoglu, 2003). In the light of this information, the

<sup>&</sup>lt;sup>1</sup> Recep Tayyip Erdoğan University Faculty of Education Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Ministry of National Education Malatya

purpose of this study is to determine the attitudes of the sports high school students towards the teaching profession. The sampling of the study made by using General Scanning model was consisted of 146 students of the sports high school who have been attending their education in grades 3 and 4 of the sports high schools in the provinces of Adiyaman, Elazığ and Malatya. The research data was collected by "A scale for attitude of students towards the teaching profession", developed by Semerci (1999). Arithmetic mean, standard deviation, t-test, and one-way analysis of variance (ANOVA) was used in this study.

As a result of the research, it was found that the students' attitudes towards the teaching profession was at a lower middle level. When the perception points related to the teaching profession taken from the students have been examined, it was determined that the student studying in Adiyaman (2.52) and Elazig (2.28) had more perception point compared to that of students studying in Malatya (1.98). In addition, it was determined that the male students studying in Adiyaman compared to the male and female students in the other provinces, and the students studying in grade 3 compared to the students in grade 4 and compared to the students in grades 3 and 4 in the other provinces, had attitudes of medium level towards the teaching profession. It was determined that there was statistically significant difference among the attitude data of students studying in different provinces with regard to the teaching profession, and in terms of gender, there was a significant difference among the attitudes of the students studying in Elazig province with regard to the teaching profession, whereas in the other provinces there wasn't any significant difference and there was a significant difference among the attitudes of the students towards the teaching profession varying according to the grades.

Keywords: Teaching Profession, Attitude, Sports High Schools

## PP. 430 THE MEASUREMENT AND EVALUATION TOOLS WHICH PHYSICAL EDUCATION TEACHERS USE AND THEIR OPINIONS ABOUT THE FREQUENCY OF USAGE

<u>Fatih Özgül</u><sup>1</sup>, Murat Kangalgil<sup>1</sup>

#### Abstract

This research aims, the measurement and evaluation tools that physical education teachers use in the process of measuring and evaluating. And also aims to get their opinions about the frequency of their usage of the tools. The research have been made with 230 physical education tachers which have been determined according to the randomly method who were working at the schools which connected to the Ministry of National Education in the cities; Antalya, Hatay, İstanbul, İzmir, Ordu, Samsun, Sivas and Trabzon.72 (%31,3) of them were female and 158 (%68.7) of them were male physical education teachers. Their lesson hours were between 14 and 32. And their ages were between 25 and 45. In this research, a questionnaire prepared by the Anıl and Acar (2008) was used to determine the opinions of the physical teacher's measurement and evaluaiton tools in the process of the measuring and evaluating. Questionnaire is to determine physical education teachers opinions for the usage of the traditional and alternative measurement tools divided into four sub dimensions as; time dimension, economic size, class size and application size. In the questionnaire there 37 items which is rated on five-point Likert-type as; "Strongly Disagree", "Disagree", "No idea", "Agree", "Strongly Agree". In the analyzing of the data, the frequency and percentage of the data were calculated obtained from the questionnaire and were presented with the help of the tables. According to the findings the using of measurement tools of the physical education teachers in terms of the time dimension; 82 individuals (% 35,7) says traditional measurement tools and not take a lot of time in the classroom, 108 individuals (%47) prefers the measuring tool of which preparation is the easiest, 92 individuals (%40) says that a lesson hour is not enough for the traditional measurement tools, 96 individuals (%41,7) says that alternative measurement takes a lot of time and 104 individuals (%45,4) says that they use the alternative measuring tool of which the preparation is the easiest and takes a little time. In terms of economic size; 80 individuals (%34,8) tells that the financial support is needless for the traditional

<sup>&</sup>lt;sup>1</sup> Cumhuriyet University School of Physical Education and Sports

measurement tools, 89 individuals (%38,7) tells financial support is needed for the alternative measurement tools. In terms of the class size; 94 individuals (%40,8) tells that crowded classes effects negatively to the usage of the traditional measurement tools, 111 individuals (%48,3) tells that crowded classes effects negatively to the usage of the alternative measurement tools. In terms of the application; 115 individuals (%50) says that they use the traditional measurement tool of which preparation and scoring is the easiest, 112 individuals (%48,7) tells that they use the alternative measurement tool of which preparation and scoring is the easiest.

Keywords: Physical Education Teachers, Measurement And Evaluation

### PP. 448 EFFECT OF CONCEPT MAP TECHNIQUE ON TEACHING SERVICE SKILL IN TENNIS

Erdal Demir<sup>1</sup>, Kadir Koyuncuoğlu <sup>1</sup>, Ahmet Kırca <sup>1</sup>, Turgut Belik <sup>1</sup>

#### **Absract**

**Objective:** Aim of this study is examining concept maps which are a teaching technique and its effects on learning while teaching tennis service skills in physical education lessons and relationship among according to gender variable.

**Methods:** The research was conducted in semi-experimental model. The research conducted 2 hours once a week and lasted for 5 weeks. 2 of these 5 weeks spend with pre-test and post testes and in the remaining 3 weeks concept map supported service training was provided for the research group. 3 people team of experts has been established to realize training activities and implementation of the test along the research. One of the researchers served on technique grading in service, and the other one graded the balls fall in to the service box and the third one organized test field. The team situated in pre test and post test and had the same duties a long the research. In 3-week service training, they had students make exercises about service skills. In the first 20 minutes of 80 minutes long two period study, concept maps were drawn on the board with students. Then, concept maps were distributed to each student in black and white. This study continued for 3 weeks. The research has been completed by applying the post test at the end of three weeks. In the research, pre-tests and post-tests were recorded and have been revised for scoring. The research was held in Vahit Tuna Anatolian High School which is an public school connected to Ministry of National Education in Canakkale. The positive approach of the physical education teachers and school administration and school's having a gym are the reasons why the study held in this school. After the school administration and physical education teachers looking positively to the research, permission was gotten from Ministry of National Education and the research began, Firstly, a class determined to do the research. This class has been a branch of the 11th grades. In determining this class; willing of the students, having physical education classes as a single class at the gym, the small number of students interested in tennis, equal gender distribution, suitability of the time the study was conducted criteria were taken into consideration. With these criteria minimizing the variables which can affect the results of the study has been ensured. There are 26 students in the branch which constitutes the research sample. After applying the information form to the research group, 3 students who are determined to get tennis training previously were excluded. In addition, 3 students who did not want to participate and 1 student who participated in pre-test and did not participate in post test were not included in the research. Thus, the research group consisted of 19 students. 9 of these students were women and 10 of them were men. DeWitt-Dugan Service Test which is applied to determine performance by verse form used in the research as data collection tools. Verse form consists of 5 questions which include information about student's gender, school, class, history of sports experience and tennis. In DeWitt-Dugan Service Test, 10 services are made in tennis court in accordance with rules. Earns 1 point for each successful shot. If the shot is proper but does not fall into the service box, it is assessed as half (0,5) point. At the end of 10 service, point records are evaluated (Kamar, 2003).

Results: In the research, as a result of assessment of pre-test and post test, there was a significant

<sup>&</sup>lt;sup>1</sup> Çanakkale Onsekiz Mart University School of Physical Education and Sports

difference found in favour of the post- test (p<0,05). With this result, it is thought that training with concept maps is effective. There was not a significant difference found between male and female students according to gender variable of the research group (p>0,05).

**Conclusions:** As a result, it is thought that effectiveness of training activities made with concept maps technique is effective in learning and it can be used in applied courses such as physical education. In addition, it is observed that concept maps technique increases students' interest in the study.

**Keywords: Concept Maps, Tennis, Service** 

## PP. 465 EXAMINATION OF THE RELATIONSHIP BETWEEN EMOTIONAL INTELLIGENCE AND LIFE SATISFACTION OF THE UNIVERSITY STUDENTS IN SPORT SCIENCES

İdris Yılmaz<sup>1</sup>, Fatih Bektaş <sup>1</sup>, Akın Çelik <sup>1</sup>, Sabiha Kaya <sup>1</sup>

#### **Abstract**

**Objective:** Higher education aims to provide students with the necessary academic qualification during their career, guide them in their career development, and thus increase their life satisfaction by facilitating their job and prompting them to carry out their profession in the way they desire. On the other hand, individuals with high emotional intelligence skills, when compared to others, show higher performances in such issues as leadership, team-work, conflict management, and effect management. Therefore, emotional intelligence is one of the necessary measures for individuals to pave their way to succeed in their career and experience the intended success and satisfaction. In recent years, in Turkey, it is observed that studies in which students' emotional intelligence levels and life satisfaction are examined in terms of different variables. However, in these studies, it is evident that the relationship between emotional intelligence ability and life satisfaction has not been examined yet. For this reason, the purpose of this research is to determine the relationship between emotional intelligence and life satisfaction of the university students studying sports sciences.

**Methods:** The participants of the study included 894 students (349 female and 545 male) who continue their higher education in physical education and sports higher schools in six universities (Ahi Evran, Erciyes, Gaziantep, İstanbul, Kafkas, Karadeniz Technical University) in 2011-2012 Academic Year. The age average of these participants is 21.84±2.31. 492 participants are from physical education and sports teaching department, 175 of them are at coach training department and 227 students are from sports management department. "Life Satisfaction Scale" developed by Diener, Emmons and Griffin (1985) and "Schutte Emotional Intelligence Scale" developed by Schutte et al (1998) were used to collect research data. Pearson product-moment correlation coefficient technique was utilized to determine the relationship between life satisfaction and emotional intelligence levels. **Results:** Research findings show that there is a positive relationship between emotional intelligence total points and life satisfaction points (r=.179; p< 0.01). A significant correlation was observed between life satisfaction points and the such emotional intelligence scale subdimensions as optimism and mental state regulation (r=.223; p<0.01) as well as expressions of emotions (r=106; p<0.01). No relationship was observed between benefitting from emotions sub dimension and life satisfaction (r=.043;

**Conclusions:** At the end of the study, it was found that there is a positive relationship between emotional intelligence abilities and life satisfaction of the university students in the field of sport sciences. From this result, it can be concluded that individuals with high emotional intelligence ability satisfy their life more. Considering the fact that emotional intelligence abilities can be improved, it can be useful that instructors place activities and use techniques that can improve students' emotional intelligence abilities while they are planning their classes.

Keywords: Life Satisfaction, Emotional Intelligence, Sports Sciences

<sup>&</sup>lt;sup>1</sup> Karadeniz Technical University School of Physical Education and Sports

### PP. 467 INVESTIGATION OF ATTITUDE TOWARDS CHEATING AMONG UNIVERSITY STUDENTS

Duygu Harmandar Demirel <sup>1</sup>, <u>Utku Işık</u> <sup>1</sup>, Mehmet Demirel <sup>1</sup>, Sinem Adalıoğlu <sup>1</sup>, Canan Yıldız <sup>1</sup> Dumlupınar University School of Physical Education and Sports

#### Abstract

**Objective:** The aim of this study; investigating of cheating frequency of different variables like gender, grade, faculty among university students and investigating of cheating behavior is affected by student's attitude towards cheating or not.

**Methods:** In this study as data gathering tool "The Scale for Attitude Towards Cheating", Turkish adaptation held by Semerci (2003) Scale was developed like likert-type. The scale consists of 67 items 30 items are positively while 37 items negative. The study group was consisted of 825 university students who studying in Kutahya Dumlupınar University (N=425) and Afyon Kocatepe University (N=400) of Scool of Phsical Education and Sport and Faculty of Education. The data evaluated with SPSS 21 for windows package program. In the evaluation of data first reliability analyses made for the sampling group and then One Sample Kolmogorov Smirnov test made as a normality test. Also in addition to descriptive statistics tests percentage (%) and frequency (f) Mann Whitney-U and Kruskal Wallis made for significant differences (p=0.05) (Wilkinson, 1999).

**Results:** According to Mann Whitney-U results significant differences in gender variables with attitude towards cheating (z=-2,894; p<0,05). Female have high scores than male. According to Mann Whitney-U results no significant differences in university variables with attitude towards cheating (z=-1,304; p>0,05). In addition to; Mann Whitney-U results significant differences in faculty variables with attitude towards cheating (z=-4,534; p<0,05). Faculty of Education student's have high scores than Scool of Phsical Education and Sport student's. According to Kruskal-Wallis results no significant differences in grade variables with attitude towards cheating (Ksz=3,879; p>0,05).

**Conclusion:** According to analysis; Female have high attitude towards cheating scores than male. In addition, Faculty of Education students more cheating tends to Schhol of Phsical Education and Sport student's. However; no significant differences in university and grade variables with attitude towards cheating.

**Keywords: Attitude Towards Cheating, Cheating** 

### PP. 468 EXAMINING CLASSROOM TEACHERS' VIEW ABOUT TEACHING PHYSICAL EDUCATION

<u>Şakir Serbes</u><sup>1</sup>, Cevdet Cengiz <sup>1</sup>, Duygu Adile Atacer <sup>1</sup>

#### Abstract

**Objective:** Purpose of the study is to examine classroom teachers' view about constructivist physical education teaching and their views were examined according to their gender, school, and in-service period.

**Method:** Participants were from different elementary schools (n=11) in central district of Canakkale ( $n_{male} = 58$  and  $n_{female} = 72$ ) voluntarily participated to the study. For data collection, Turkish version (Ağbuğa, 2013) of Constructivist Teaching Practices Inventory in Elementary Physical Education (Chen, Burry-Stock and Rovegno, 2000) questionnaire and personal data form was used. The questionnaire consisted of twenty-five items on a five-point rating scale which has three subscales; social cooperation, personal relevance, games/skills.

**Results:** According to the descriptive findings, classroom teachers' Constructivist Teaching Practices Inventory in Elementary Physical Education total average scores were (ort=4.18±.50). Gender based results were also calculated (Male ort=4.17±.50 and Female ort=4.19±.50). In-service period of

<sup>&</sup>lt;sup>1</sup> Çanakkale Onsekiz Mart University School of Physical Education and Sports

classroom teachers have different scores from the constructivist teaching practices inventory in elementary physical education questionnaire. 6-10 years of experienced classroom teachers' descriptive analyses showed that their scores were higher than other teachers (ort=4.22±.42). On the contrary, 16-20 years of experienced classroom teachers have the lowest scores (ort=4.09±.44). Multivariate Analyses of Variance (MANOVA) results indicated significant difference between constructivist teaching and schools (Wilks'  $\Lambda$  = .42,  $F_{(30,197)}$  = 2.26, p < .05) and in-service period (Wilks'  $\Lambda$  = .71,  $F_{(9,163)}$  = 2.78, p < .05). However, no significant difference was observed between sex of teachers (Wilks'  $\Lambda$  = .92,  $F_{(3,67)}$  = 2.02, p >.05).

**Conclusion:** Classroom teachers' constructivist teaching approaches were positive and there was no significant difference between constructivist teaching physical education and sex of teachers (p > .05). Moreover, there were significant differences between constructivist teaching physical education and school, in-service period of classroom teachers (p < .05)

Keywords: Constructivist Approach, Classroom Teacher, Teaching Physical Education

### PP. 497 ASSESSMENT OF THE PHYSICAL TRAINING AND SPORTS DEPARTMENT THE PRACTICES IN SOCIAL SERVICE LESSON IN TERMS OF STUDENT GAINS

<u>Uğur Şentürk</u><sup>1</sup>, Bilal Karakoç <sup>1</sup>

<sup>1</sup> Çanakkale Onsekiz Mart University School of Physical Education and Sports

#### **Abstract**

**Objective:** This study aims to show what gains students had as a result of the projects that were carried out in the 2013-2014 school year within the scope of the undergraduate 3<sup>rd</sup> grade Practices in Social Service (PSS) course in the Physical Training and Sports department of the High School of Physical Training and Sports, Çanakkale Onsekiz Mart University (ÇOMU). In this context, documents relating to the projects that were carried out in the PSS course between the years of 2013 and 2014 were examined in accordance with the purpose of the study. A case study, as one of the qualitative methods of research, was carried out.

**Methods:** The study group of the research, which consisted of 36 students (16 females and 20 males) divided into 6 groups each consisting of 5-6 persons, performed a total of 6 PSS projects in 14 weeks based on 1 hour theory and 2 hours application per week. The "Appendix 7. Practices in Social Service (PSS) projects evaluation form" which is included in the PSS course directive published by the ÇOMU Physical Training and Sports Department was applied to all of the students as a data collection tool. Descriptive analysis was used in the analysis of the data and the data obtained were tabulated and interpreted. In the end of the research, candidate instructors applied the project in 6 primary schools and reached a total of 3000 primary school students.

**Results:** Teamwork-Oriented Results, "Project-Wide Activities In The Planning And Implementation Stage, What I Found Out? Ratio is 83.33% Teammates Understood the importance of the study in cooperation and solidarity, 77.77% ratio is the expression I learned To Myself Against a community, sensitive to the community I live In Expences 88.88% an individual needed to be Learned, how to help Students With the problem raised by 69.44% happier than I Learned, Considering How each given can be told, 55.56% Expression Overlaps with destinations Served within projects And Responsibilities of students raised by.

Conclusions: Gains that students had as a result of this implementation was about learning to work in cooperation, an increase in their capacity of solving situational problems that they encounter, and understanding the importance of acting and working together. It was determined that the most important problems experienced when carrying out the projects were delays in the scheduled activities due to adverse weather conditions and a lack of space and materials in the application of the scheduled activities.

**Keywords: Physical Training, Practices in Social Service Course** 

## PP. 498 THE OPINIONS AND IMPLEMENTATIONS OF PRIMARY SCHOOL CLASSROOM TEACHERS REGARDING THE GAME AND PHYSICAL ACTIVITIES COURSE

<u>Uğur Şentürk</u><sup>1</sup>, Bilal Karakoç <sup>1</sup>, Erdal Demir <sup>1</sup>, Kadir Koyuncuoğlu <sup>1</sup>, Ümmühan Bektaş <sup>1</sup> Canakkale Onsekiz Mart University School of Physical Education and Sports

#### Abstract

**Objective:** This is a descriptive study which aimed to examine the opinions and implementations of primary school classroom teachers regarding the game and physical activities course. The screening model as one of the quantitative research methods was used in the study. Sample of the study consisted of 93 classroom teachers serving in the Primary Schools of Çanakkale Ticaret Borsası, Canakkale Onsekiz Mart, Canakkale Atatürk and Canakkale Ömer Mart.

**Methods:** The questionnaire method was selected as a data collection tool. We utilized the questionnaire form which was developed by Tortop (2010) to determine the opinions and implementations of classroom teachers regarding educational games. The data obtained by the questionnaire were subjected to descriptive statistical analysis.

**Results:** The following rates were determined based on the opinions of the classroom teachers who participated in the study: "Interest in Sports as a Spectator or for Health" (79.6%); "One of the objectives of the game and physical activities course is to contribute to the purposes of the general education by movement" (73.1%); "The game and physical activities course is heeded as much as other courses and it is performed in compliance with its objective" (12.9%); "The game and physical activities course hours are also used to close the gaps from other courses" (54.8%); "Branch teachers should conduct the game and physical activities course in all classrooms of primary schools" (65.6%); "I believe that sufficient care is shown for the game and physical activities course in primary schools" (8.6%); "I think that I have sufficient knowledge and skills to perform education by game" (10.8%).

Conclusions: It is concluded based on the statements of the classroom teachers that the game and physical activities course contributes to the goals of general education, that the hours of the game and physical activities course are also used to close the gaps from other courses, that there are not sufficient seminars to provide classroom teachers with practicability of implementation, that they do not have sufficient knowledge and skills for the course, that the game and physical activities course should be conducted by branch teachers in all the classrooms of primary schools, and that classroom teachers do not have the support of the administration for the course such as in terms of course materials, course space, etc.

**Keywords: Game and Physical Activities Course** 

#### PP. 507 THE GOALKEEPER ISSUE IN THE FOOTBALL OF TURKEY

Mehmet Şahin<sup>1</sup>, <u>Nevruz Bilgin</u><sup>1</sup>

#### Abstract

**Objective:** The aim of our study titled the goalkeeper issue in the football of Turkey; occupying all the goals by transferring foreign goalkeepers from abroad for the Super League teams rather than hiring Turkish goalkeepers. For many years, Turkey does not train goalkeepers who can show off in the international arena. The problems of this football environment, which could not establish a goalkeeper training system and the alternatives has been narrowed due to the foreign goalkeepers in terms of keeping the goals of the national teams, has been analyzed within this study. The goalkeeping position should be considered as the most risky position in the football not only because of football itself but also the requirement of highest level of professional equipment. The goalkeeping position must be considered as it has its own borders like an autonomous region within the boundaries of

<sup>&</sup>lt;sup>1</sup> Mehmet Akif Ersoy University School of Physical Education and Sports

football. In fact, the goalkeeping position can be accepted as an individual branch in a team sports. The goalkeepers, who become an instant success, are transferred to big football clubs before reaching a professional level to wait as substitute goalkeepers of the foreign goalkeepers that have good careers. Their development suddenly stops. Rustu Rencber is the only one who was able to break this cycle. The question of "Why Turkey cannot raise successful goalkeepers?" is being discussed in the football environments. There are some reasons come forth as follows; the lack of goalkeeper coaches, the passion of executives for transferring from abroad, the attitude of foreign coaches that bring foreign goalkeepers along and even the media that praises the foreigners, but criticizes the local goalkeepers.

Method: The scanning model was employed in this study. There are 15 websites took place in the

**Method:** The scanning model was employed in this study. There are 15 websites took place in the study. The foreign goalkeepers were analyzed in chronological order and interpreted descriptively, who have come to the Super League of Turkey, called as the first league previously, after 1970.

**Results:** The foreign goalkeepers and their teams were classified from 1994-1995 to 2007-2008 seasons.

**Conclusion:** The issue of goalkeeper is an ongoing problem for 40 years in the football of Turkey. In this process, good-bad, cheap-expensive, old-young goalkeepers have been transferred. Their contribution to the country football is a matter of debate. The football clubs have to establish "goalkeeper school" similar to the "football school" for younger age groups immediately. All football clubs, who participate to the organizations of federation including the amateurs, have to include their sportsmen and coaches in the training processes.

Keywords: Football, Goalkeaper, Problem

### PP. 526 PRIMARY SCHOOL SECOND STAGE STUDENTS' OPINIONS ABOUT EXTRACURRICULAR SPORT ACTIVITIES

Gizem Tahmazoğlu<sup>1</sup>, Nevin Gündüz <sup>1</sup>

#### **Abstract**

The aim of this study is to determine primary school second stage students' opinions about extracurricular sport activities, 442 students who are at 7th grade at primary and state schools in Yenimahalle and Cankaya towns in Ankara attended this research. Number of school was determined to decide the schools where the questionnaire would be carried out. The method of simple random sampling was used for private and state schools; total 20 schools, 10 for each town (5 of them are private, 5 are state schools), were chosen and the questionnaire is applied to the students in these schools. In this research, 5 point Likert Scale which determines the participation level of students in extracurricular sport activities, whose validity and reliability coefficient was found as .72 and was developed by Sati Akgül and et al.(2012) was used. (1: strongly disagree, 2: disagree, 3: neutral, 4: agree, 5: strongly agree). The questionnaire consists of two parts. First part includes students' demographic information (7 questions), second parts includes articles determining the participation of students in extracurricular sport activities (Article 13). In addition the reliability study of the questionnaire applied in this research has been done and it was found as .82. In the statistical analysis of the research, opinions from questionnaire have been interpreted by tabulating them with frequencies and percentages. t-test and analysis of variance (One Way ANOVA) was performed by comparing students' demographic information and opinions in the questionnaire, p <0.05 significance level is based on. The Tukey and LSD test was applied in order to determine what has caused the difference in significant results. As a result of this study, it has been revealed that the article which students participating in the research agree the most with their opinions about participating in extracurricular sport activities is 'I think extracurricular sport activities are useful.' (x= 4.15) and the article which they agree the least is 'the absence of locker rooms in my school has an effect on not participating in sports activities.' (x = 2.89). As a result of comparing participation level of students in extracurricular sport activities in terms of gender, it was found that there is a statistical significant difference [t (440) = 3.442; p <0.05)] as a result of t-test done for answers for the article 'I think extracurricular sports

<sup>&</sup>lt;sup>1</sup> Ankara University Faculty of Sport Sciences

activities are useful.' Difference is in favor of girls. As a result of comparing participation level of students in extracurricular sport activities in terms of school type, it was found that there is a statistical significant difference [t(440)=2,943; p<0,05)] as a result of t-test done for answers for the article 'I think my relationship with teachers and directors in the school will develop'. Difference is in favor of private school. It was found that about the participating extracurricular sport activities there is a statistical significant difference between students' opinions, in terms of education level of the mother and father, about the article 'That I have health problems has an effect on not attending sport activities.' and in terms of education level of the father, about the article 'That there is not facility or equipments for the branch of sports that I want has an effect on not attending sport activities.'

Keywords: Family, Physical Education Teacher, Extracurricular Sport Activities, Primary School

### PP. 539 PERCEPTIONS FOR CAREER VALUES OF PHYSICAL EDUCATION TEACHERS RELATED TO THEIR PROFESSION

Cenk Temel<sup>1</sup>, Mehmet Güllü<sup>1</sup>, Faruk Akçınar<sup>1</sup>, Mustafa Altınkök<sup>2</sup>

#### Abstract

**Objective:** The aim of this study is to examine the perceptions for career values of physical education teacher related to their profession.

**Methods:** Descriptive method has been used in the research. Research group consists of 113 female and 296 male, in total 409 physical education teachers. "Career Values Scale" has been used in the research. The scale was developed by Jansen and Chandler; and in our country it was carried out for validity and reliability by Aktaş (2004) and adapted to the teachers by Uslu (2006). It includes 34 questions, in the style of 5 point Likert Scale and consists of 11 sub-dimensions. Mann Whitney U test and Kruskal Wallis Test have been used for data analysis.  $\alpha$ =0,05 has been chosen for significance level.

**Results:** Arithmetic average point of the career values of the physical education teachers related to their profession has been found in order as for eagerness for quitting dimension (X=3,40), technical / functional dimension (X=3,47), fighting period (X=3,75), self-determination/independence dimension (X=3,78), life-style dimension (X=3,81), administrative dimension (X=3,83), security / stability dimension (X=3,93), challenging dimension (X=3,94), enterprising dimension (X=4,05), career satisfaction dimension (X=4,10), self-commitment dimension (X=4,21). There is significant difference in the security/stability dimension, self-determination/independence dimension and lifestyle dimension according to the genders of the teachers (p<0.05). There is significant difference in the technical// functional, administrative, enterprising, fighting, challenger and self-commitment dimensions according to the marital status of the teachers (p<0,05). There is significant difference in the technical/functional, self-determination/independence, administrative, fighting and challenging dimensions according to the ages of the teachers (p<0.05). There is significant difference in the selfdetermination, challenging, life-style, eagerness for quitting dimensions according to the service period of the teachers (p<0,05). There is significant difference in the security/stability, enterprising, fighting, challenging, self-commitment, eagerness for quitting and career satisfaction dimensions according to the educational status of the teachers (p<0.05). There is significant difference in the selfdetermination, challenging, life-style and eagerness for quitting dimensions according to the school types of the teachers (p<005).

**Conclusion:** The highest arithmetic average has been found for the self-commitment dimension and the lowest average for the eagerness for quitting dimension for the career values of the physical education related to their profession. The gender, marital status, age, service period, educational status and school types change the career values of the teachers related to their profession. Consequently, it has been observed that the physical education teachers have career satisfaction and they commit

<sup>&</sup>lt;sup>1</sup> İnönü University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Akdeniz University School of Physical Education and Sports

themselves to their profession.

**Keywords: Physical Education Teacher, Career Values** 

### PP. 542 THE EFFECT OF GENDER ON SOCIALIZATION IN PHYSICALLY HANDICAPPED PERSONS WHO REGULARLY PARTICIPATED SPORTS

Şehmus Aslan<sup>1</sup>, Bülent Ağbuğa <sup>1</sup>

#### **Abstract**

**Objectives:** Socialization is to learn the life style of a certain group or society and an interaction process, at the same time. In this process, model behaviours are personalized by the individual and consequently, individual develops an identity belonging to that group or society. (Şahan, 2008). The purpose of this study was to compare socialization status of male and female physically handicapped persons who regularly participated sports.

**Methods:** The sample was consisted 105 physically handicapped persons aged between 16 to 55 years (avarage age $\pm$ SD: 28.98  $\pm$  48.76 years) who lived in Denizli, Aydın ve Konya cities. 54 (51.4%) participants were male and 51 (48.6%) participants were female.

Data related demographic characteristics, socio-economical status, handicap status were collected. Socialization of a handicapped person were assessed by using sports socialization second subscsle of Sports and Socialization Questionnaire (SSQ) which was developed by Şahan. The subscale of SSO consisted 35 items. The scale was 5-Likert style. The increase of score means improve of socialization level. Mann Whitney U Test was used for statistical analysis for comparison of male and female' scores of SSO.

**Results:** When the compared the scores of female and male disabled people who regularly participated sports; the average SSO score of male participants were  $3,89\pm0,43$ , the average SSO score male disabled people were  $3,79\pm0,41$ . The male disabled people have higher SSO score than the female participants. The SSO subscale's score of female and male participants was not statistically significantly different (p>0.05).

**Conclusions:** The finding of our study shows that gender does not effect on socialization in physically handicapped persons who regularly participated sports. The lights of the our results, we suggest that future study for evaluation the effect of gender on socialization in a physically handicapped persons sample with less range of age.

Keywords: Sports, Physically Disabled, Socialization

#### PP. 548 THE EXAMINATION OF LEARNING STYLES OF HIGH SCHOOL STUDENTS

Mehmet Ulaş  $^1$  , Ender Şenel  $^2$  ,  $\underline{\text{Oğuz Kaan Esentürk}}^3$ 

#### Abstract

**Objective:** The aim of this study was to examine learning styles of high school students.

**Methods:** Learning Styles Inventory, developed by Felder and Silverman (1996), adapted to Turkish by Fer (2003), was applied to sample group consisting 229 high school students. Descriptive research model was used in the study. Statistic techniques of frequency and percentage analysis were used to analyze collected data. Independent t test was used to analyze differences between genders and sport participation status. One-way ANOVA test was used to analyze difference between grades.

<sup>&</sup>lt;sup>1</sup> Pamukkale University School of Sport Sciences and Technology

<sup>&</sup>lt;sup>1</sup> Kırıkkale University School of Physical Education and Sports

 $<sup>^2</sup>$  Muğla Sıtkı Koçman University School of Physical Education and Sports

<sup>&</sup>lt;sup>3</sup> Gazi University School of Physical Education and Sports

**Results:** Findings showed that there was no significant difference between genders in terms of learning styles except for active –reflective style. No significant difference was found between "yes" and "no" responds of sport participation. While significant differences were found between grades in terms of sensing – intuitive, visual – verbal, sequential – global styles, no significant difference was found in terms of active – reflective.

Keywords: Learning Styles, High School Students, Learning

# PP. 549 THE EXAMINATION OF THE COOPERATION PROTOCOL OF THE YOUTH, PHYSICAL EDUCATION, SPORT SERVICES AND ACTIVITIES BETWEEN THE GENERAL DIRECTORATE OF YOUTH AND SPORT AND MINISTRY OF NATIONAL EDUCATION FROM THE POINT OF SCHOOL SPORTS

Volkan Öztürkalan <sup>1</sup>, Nevin Gündüz <sup>1</sup>, N. Bahadır Kayışoğlu<sup>2</sup>

<sup>1</sup> Ankara University Faculty of Sport Sciences

#### Abstract

**Objective:** The purpose of this research is to examine the views of the physical education teachers and the directors who work at General Directorate of Youth and Sport on the organization of the school sports competitions regarding a cooperation protocol signed between the General Directorate of Youth and Sport and the Ministry of National Education. **Methods:** Interview was used as a data collection method. In this research, which was signed on 05.11.2010 between Ministry of National Education and General Directorate of Youth and Sport, youth, physical education, sports services and activities related to cooperation protocol was examined. School sports competition discussion examined which was held in PE teachers mail group, after evaluating teachers' views question pool was created. After obtaining expert opinion on the subject questions were determined. The study group consists of 5 primary school teachers, 5 secondary school teachers who are working in Ankara and 5 managers who are in charge of school sports competitions of the General Directorate of Youth and Sport (n=15). Teachers were asked 4 and managers were asked 7 questions, 3 of which were mutual.

**Results:** When examining interview findings, positive devolopments was reported such as schools can join sport competion without admission fee, pay for expenses such as travel, accommodation in countrywide promotion competions, on the other hand participation without charge increase the number of schools default competions without excuse after signed protocol.

**Conclusion:** In the study, it is concluded that the participation fee's not being demanded from the schools participated in the sport competitions caused an increase in the number of the certified student athletes and the branches; but despite an increase in the budget by GSGM, the school sport activities still cannot be performed efficiently. Therefore, it is considered that the students' concerns about academic failure causes them to refrain from participating in sports can be eliminated thanks to the regarding provisions of the protocol.

**Keywords: Extracurricular Activities, School Sports** 

### PP. 563 DOES THE GENDER HAS EFFECT ON MOTOR MOTOR COMPETENCE IN ADOLESCENTS WITH MILD INTELLECTUAL DISABILITY?

Ummuhan Baş Aslan<sup>1</sup>, Sehmus Aslan<sup>2</sup>

#### **Abstract**

<sup>&</sup>lt;sup>2</sup> Karabük University Hasan Doğan School of Physical Education and Sports

<sup>&</sup>lt;sup>1</sup> Pamukkale University School of Physical Medicine and Rehabilitation

<sup>&</sup>lt;sup>2</sup> Pamukkale University School of Sport Sciences and Technology

**Objective:** Intellectual disability (ID) is a brain development deficiency, which affects the cognitive functions as well as the motor skills. Previous studies showed that motor skills dysfunctions impede the child's participation or performance at home, in schools, and in the community. The aim of this study was to evaluate the effect of gender on motor competence adolescents with mild ID.

**Method:** The study included a total of 44 participants aged between 12 to 18 yr, of which 20 (47.6%) were female and 22 (52.46%) male adolescents with mild level ID. The participants with ID (IQ level 50 to 70) were students of Intellectual Disability Schools for the mentally disabled and had been diagnosed with ID at a Ministry of Health hospital. The exclusion criterias were visual disorders, auditory disorders, problems of the vestibular system and extremity injuries affecting motor performance. The motor competence of the participants were evaluated using the Bruininks-Oseretsky Test of Motor Proficiency, Short Form (BOT-2 SF). BOT-2 is a method which evaluates motor functions of children and adolescents between the ages of 4 and 21 years. The BOT-2 has validity and reliability in children and adolescents with ID.

**Results:** The average age of male and female participants were  $14.75\pm1.77$  and  $15.55\pm2.17$ , respectivelly. There was no significant differences between male and female participants in terms of age (p>0.05). BOT-2 SF total scores of female mild ID adolescents were  $36.05\pm1.80$  and male mild ID adolescents' score was  $42.81\pm1.46$ . As a result of the evaluations comparing BOT-2 SF scores were not significant differences determined between male and female participants male and female participants (p>0.05).

**Conclusion:** The results of the study suggested that there is no gender differences for motor competence in mild ID adolescents. Further comparative studies are needed in a bigger sample with adolescents and children in order to examine the impact of gender on the motor skills of individuals with ID.

Keywords: Intellectual Disability, Motor Competence, Adolescent

### PP. 588 REASONS OF PREFERENCES AND FUTURE EXPECTATIONS OF SPORTS HIGH SCHOOL STUDENTS (SAMPLE OF SARIKAMIŞ SPORTS HIGH SCHOOL)

Cansel Arslanoğlu<sup>1</sup>, Erkal Arslanoğlu<sup>1</sup>, <u>Ergün Çakır</u><sup>1</sup>, Ali Dursun Aydın <sup>1</sup>

#### Abstract

**Objective:** The aim of this study is to explain reasons of preferences and future expectations of students in Sports High School in Sarıkamış graduated primary school.

**Methods:** The sample of study group is formed by 100 students, as 79 boys and 21 girls, who have had education in the Sarıkamış Sport High School in 2013-214 academic year. General screening model has been used and data has been collected by personal information and questionnaire form developed by investigators. In order to evaluation of the data SPSS (Statistical Package for Social Sciences) version 19 was used. Descriptive statistics and frequency distribution were used.

**Results:** 43 students were between 14-15 and 57 students were between 16-17 according to age variable. According to educational status of students parents; illiterate mother was %7 and illiterate father was %3. They answered the question "Which school do you want before coming sports high school". %67 of students want to own school, %33 of want to other high schools. Also, %25 of students preferred science hig school as a first choice. The factors of prefer sports high school, %43 of students their own preference and %34 of students were affected their teachers. The reason of preference of sport high school was to have a profession (%55). Additionally, %62 of students want to go higher education and %16 of them don't want to go to university. According to gender variable, they answered the question "which kinds of high school do you prefer before sport high school". Boys generally want to go sport high school and girls want to go other high schools as a firs choice before Sport High School. **Conclusions:** We say that, boys mostly preferred sport high school to have profession and girls want to go other high schools as a firs choice.

Keywords: Sports High School, Student, Profession.

<sup>&</sup>lt;sup>1</sup> Kafkas University Sarıkamış School of Physical Education and Sports

### PP. 619 ANALYZING THE ATTITUDES OF SCHOOL ADMINISTRATORS TOWARDS PHYSICAL EDUCATION LESSON IN TERMS OF SOME VARIABLES

Varol Tutal<sup>1</sup>, Ebubekir Aksay<sup>2</sup>, Mehmet Efe<sup>3</sup>

- <sup>1</sup> Provincial Directorate of National Education Malatya
- <sup>2</sup> German Sport University Cologne Deutsche Sporthochschule Sport
- <sup>3</sup> Siirt University School of Physical Education and Sports

#### **Abstract**

**Objective:** The aim of this study is to analyze the attitudes of school administrators towards Physical Education lesson in terms of some variables.

**Method:** Descriptive method of quantitative research methods was used as the research method. Research group consists of 360 school administrators working in central schools of Malatya Province. As data collection tool, "The Attitude Scale of Physical Education Lesson for School Administrators (ASPELSA)", developed by Tutal (2014), was used, and for data analysis, Kruskall Wallis H Test and Whitney U Test were carried out. The level of significance was chosen as  $\alpha$ =0 05.

**Results:** There was statistically no meaningful difference (p>0,05) in the attitude of school administrators towards Physical Education regarding their gender, age, educational background, professional service years, service years in management, appointment status of management, types of managerial positions in school, number of students, the availability status of physical education teachers, and whether there are available indoor sports halls or not, and sportive success among schools.

**Conclusion:** As a result, it has been found that the attitudes of school administrators towards Physical Education are positive.

Keywords: School Administrators, Physical Education Lesson, Attitude

### PP. 626 ANALYZING THE ATTITUDES OF SCHOOL ADMINISTRATORS TOWARDS PHYSICAL EDUCATION LESSON

Varol Tutal <sup>1</sup>, Ebubekir Aksay <sup>2</sup>, Mehmet Efe<sup>3</sup>

- <sup>1</sup> Provincial Directorate of National Education Malatya
- <sup>2</sup> German Sport University Cologne Deutsche Sporthochschule Sport
- <sup>3</sup> Siirt University School of Physical Education and Sports

#### **Abstract**

**Objective:** The aim of this study is to analyze the attitudes of school administrators towards Physical Education Lesson.

**Method:** Case study design of qualitative research methods was used as the research method. In this study, according to maximum variation method, meetings with twenty school administrator working in the city center of Malatya province were carried out with a semi-structured interview form, which had 10 questions and was developed by the researcher. During these meetings, thirteen school administrators gave permission to use a recording device, but the other seven school administrator didn't allow doing so. The interviews of school administrators who didn't allow recordings were recorded in writing. Recordings made with a voice recorder then put in writing and loaded into Nvivo 9.00 packaged software. For data analysis, descriptive and content analysis were performed.

**Results:** Codes, such as "OY1", "OY2", were given to each and every administrator in order to keep the personal information of administrators safe in the packaged software. As a result of content

analysis, the attitudes of school administrators towards PE Lesson were categorized into three main themes. These are as follows; The situation of physical education lesson in the school, The situation of physical education lesson activities done outside the class and The implicit effect of physical education lesson. In the theme of the situation of physical education lesson in the school, there are eight sub dimensions and thirty concepts. In the theme of activities done outside the class, there are seven sub dimensions and sixteen concepts. In the theme of implicit effect of physical education lesson, there are three sub dimension and five concepts.

Conclusion: As a result, it has been confirmed that the attitudes of school administrators towards physical education lesson are positive. But, it has also been observed that there are school administrators who have negative attitudes. The school administrators who were positive pointed out that physical education lesson contributed greatly to the students' social, physical and mental development. However, the school administrators who were positive turned into negative because of some teachers' behaviors and it was also observed that administrators who didn't want any noise during lessons adopted negative attitudes.

**Keywords: School Administrators, Physical Education Lesson** 

### PP. 653 THE IMPACT OF PHYSICAL ACTIVITIES ON THE MOTOR SKILLS, MENTAL AND SOCIAL DEVELOPMENT OF CHILDREN WITH ASD

#### Sinem Kortay Canaloğlu<sup>1</sup>

<sup>1</sup> İnönü University Exercise and Sport Education For The Disabled

#### **Abstract**

**Objective:** This research aims to reveal the impact of certain physical activities on the development of motor skills, mental and social skills of children on the autism spectrum disorder (ASD).

**Methods:** According to the report of World Health Organization (WHO), it is estimated that there are around thirty thousand individuals with ASDs in Turkey. However, not only the researches on physical activities with children diagnosed with ASD, but also the outcomes of these researches are not well known. In fact there are a number of diverse results from these researches. This paper aims at revealing these differences in approaches of diverse researches through literature review of the field.

**Results:** ASD, as a developmental disorder, is diagnosed around the age of 3 with deficiencies in motor, communication and social skills. It is maintained that compared to children with a normal development, children at the age of 0-12 months with a suspect of having ASD are seen to have less motor skills, such as moving legs, catching, holding, attempting to touch and these skills are seen to decrease over time. It is seen that this disorder by affecting both the muscle tone and mental perception causes a number of differences in motor development. Difference in walking style, postural defect, running speed, inability to maintain equilibrium and coordination, inadequacy both in controlling objects and in coordination of hand and eye, plan of movement, difficulty in the imitation of the observed movement and finding orientation are some of the effects of ASD. These effects results in lower performance in maintaining daily social activities that require motor skills and abilities and therefore such a poor performance negatively affects the children's mental, social and physical development. Previous researches underlie the importance of physical activities for these children in enhancing their development of important motor skills and abilities and their learning. Researches mostly focus on the activities, such as jogging, aerobic, swimming, cycling, several ball games, and active computer games, and they conclude that following these activities, there is a; Reduction in their stereotype, in their offensive and malignant behavior, in their body mass index, body fat ratio, in their time without activity, in the amount of snack they eat while they are on the internet; Increase in their relationship with their peers, self-control, willing to do activities, and social skills such as accommodating to group or the environment.

**Conclusion:** Previous research indicate that physical activities are an ideal opportunity for children with ASD in enhancing their learning and important motor skills. Physical activities bring improvements in several areas. These improvements are not limited to the participation of these

children to the activities in which they were unsuccessful before, but they enable them to improve their weakness in making movements. These positive developments affect the movement performance, social interaction and self-confidence of the child. Physical activities help children with ASD to socialize and to reduce their malignant behaviors.

Keywords: Autism Spectrum Disorder, Physical Activity, Motor Skill, Mental Development, Social Development

### PP. 677 EFFECTS OF EXERCISE PROGRAM ON BALANCE IN CHILDREN WITH CEREBRAL PALSY

Verda Akyüz $^1$ , Yaşar Tatar $^2$ , Selda Uzun $^1$ , Nejla Gerçek $^1$ , Sevinç Karabürk $^1$ , Nusret Ramazanoğlu $^1$ , Cengiz Karagözoğlu $^1$ 

#### **Abstract**

**Objective:** The aim of this study is; analyzing the effects of a 12 weeks exercise program on static and functional balance in children with cerebral palsy.

**Method:** Eight children (3 female and 5 male) between 4-11 years of age who had been diagnosed with spastic CP with medical diagnosis of quadriplegic (5 subject) and diplegic (3 subject) included in this study. Children were classified according to Gross Motor Function Classification System (GMFCS) (I, II and III). Children participated in the exercise program (strength, balance, coordination) three sessions per week (60-70 minute) for 3 months (12 weeks). Balance measurements were evaluated in standard position (the feet are parallel and shoulder with apart and arms relaxed at their sides) with MatScan® (40 Hz- 1.4sensors /cm2, TekScan,Boston,MA) balance platform. Data was collected by Matscan 6.34 software (TekScan,Boston,MA) which is included in this hardware. Force measurements were performed eyes open (EO) and eyes closed (EC) for 30 seconds on double limb. Additionally, functional balance abilities were evaluated with Berg Balance Scale (BBS).

**Results:** Changes in balance parameters was calculated as a percent between pre and post training periods (6 months exercise program) for statistical analysis. EO Balance Test Parameters; Significant improvements were found on balance for COP area, M-L and A-P parameters on quadriplegic group (consecutively %58,50, %45,96 ve %25,15). And positive changes achieved in COP area (% 72,37), M-L (%52,27) and A-P (%34,31) in diplegic group.

Eyes Closed Balance Test Parameters; In balance evaluation following increments were provided for COP area , M-L and A-P parameters quadriplegia; COP area:% 15,65, M-L:%27,39 ve A-P: %1,24, diplegia; COP: % 58,55, M-L: %23,32 ve A-P: %30,97. In addition to that; One diplegic subject who couldn't complete EO and EC balance protocols pre-training, was able to complete 30 seconds of both protocols post-training training program. Also one quadriplegic subject was able to complete EC balance protocol that he couldn't performed pre-training program. Both of the groups achieved higher scores on *BBS* measurement after the training program. (quadriplegia: %20,11-diplegia: %22,41).

Conclusion: Children with diplegia had higher percentage change on balance parameters than quadriplegic children after this exercise program. Diplegic children with CP have better upper extremity and body control so it is thought that this can be the result of this condition. After a three months exercise program, M-L improved more than A-P in all children with cerebral palsy. The reason of that can be, while hip protraction-retraction strategy is dominant on M-L stabilization on double limb, ankle strategy is dominant on A-P stabilization. Ankle stabilizer (especially tibialis anterior) control must advance for A-P improvement. However, maintaining balance using ankle strategy can be limited because of spasticity in children with CP. Therefore, hip control (hip protraction-retraction strategy) improvement becomes more important for maintaining balance in this children. In light of these results, it is shown that, in addition to physical rehabilitation programs, individually programmed long term sport and exercise programs, may have positive effects on balance parameters in children with cerebral palsy.

Keywords: Cerebral Palsy, Exercise, Balance

<sup>&</sup>lt;sup>1</sup> Marmara University School of Physical Education and Sport

<sup>&</sup>lt;sup>2</sup> Marmara University Faculty of Medicine Department of Physical Medicine and Rehabilitation

### PP. 701 EFFECTS OF LONG TERM EXERCISE AND SPORTS PROGRAM ON PHYSICAL PERFORMANCE IN CHILDREN WITH HEMIPLEGIA

Sevinç Karabürk <sup>1</sup>, Yaşar Tatar <sup>2</sup>, <u>Selda Uzun</u> <sup>1</sup>, Nejla Gerçek <sup>1</sup>, Verda Akyüz <sup>1</sup>, Nusret Ramazanoğlu <sup>1</sup>, Asiye Filiz Camlıgüney <sup>1</sup>

#### Abstract

**Objective:** The aim of this study is to evaluate the contribution of long term and regular exercise programs on physical performance in hemiplegic children.

Method: Four children with CP (right hemiplegic) between 7-12 years of age were included in this study. The children were classified using the Gross Motor Function Classification System (GMFCS), and according to this classification system three children were (D1, D2, D4) level 1 and one child was level 2 (D3). Two of this children participated in the exercise program for 3 days a week (60 min) for 6 months; other two children participated for 3 days a week (60 min) for 2 years. Strength, balance and endurance measurements evaluated before and after the 6 months sports program. Additionally, changes in balance parameters were followed at 1., 6., 12. and 24. months for two children (D1 and D2). In this study, hand grip strength was measured with a dynamometer specifically designed by Dr.Yaşar TATAR for children with hemiplegia. Lower extremity muscle strength was evaluated with lateral step up test. And trunk muscle strength was evaluated with curl up test. Aerobic endurance was measured with 6 minute walk test. Balance on double limb evaluated consecutively with eyes open (EO) and eyes closed (EC) for 30 seconds on a force platform (TekScanMatScan® System, model

3150, Boston) and COP parameters (cm  $^2$  ) (centre of pressure) were examined.

**Results:** Hand grip strength, on the affected side, is improved in all subjects (D1: 60%, D2: 9%, D3: 40%). D4, who cannot squeeze the hand dynamometer at pre-training program, begin to squeeze the dynamometer 5 m Bar after the 6 months training. Hand grip strength on the non affected side is increased in all subjects (D1:11%, D2: 8%, D3:21% and D4: 40%). In lateral step up test on affected side test score was increased as following percentages; 23% for D1, 18% for D2 and 5% for D4. D3, who cannot complete any step up on affected side pre-training program, achieved 2 successful step ups after the six months training. On the non affected side 15% for D1, 27% for D2, 150% for D3 and 5% for D4 with increments were found. In curl up test, 10% (pre-test:37-post-test:41) for D1, 52% (pretest:23-post-test:35) for D2, 90% (pre-test:21-post-test:40) for D3 and 25% (pre-test:60-post-test:75) for D4, increments were seen. There were no significant improvement on 6 minute walk test (D1: 0,34%, D2: 25%, D3: %6 and D4: 0,72%). In EO static balance, 74,76% for D1, 48,05% for D2, 83,11% for D3 and 56,62% for D4, increments were found. Similarly, in EC static balance improvements were provided (D1: 65.08%, D2:11.15%, D3: 61.11% and D4: 18.27%), When followed for long term training regimen, EO-COP values were positively changed: 74,76% for D1 and 48,05% for D2 at 1-7. months, 37,58% for D1 and 81,44% for D2 at 1,13. months, 46,35% for D1 and 76,21% for D2 at 1-24. months. And, 65,08% for D1 and 11,15% for D2 at 1-7. months, 11,37% for D1 and 70,24% for D2 and 19,75% for D1 and D2 75,76% for D2, increments were detected in EC-COP. For D4, who could just stand for 10 seconds on affected side single leg in the beginning of exercise program, completed the 30 seconds balance test after 6 months sports training. Any tests were not done for other children who cannot complete the 30 seconds balance test.

**Conclusion:** Positive changes were found in EO balance after 6 months. During this period, higher differences recorded both in the subject that had better normal ankle range of motion than other subjects (D1; active 55°) and in the subject that never participated in any sports activity (D3; EO: 83,11% ve EC: 61,11%). It is known that musculoskeletal system problems (e.g. spasticity), contractures and joint range of motion negatively influence balance. The results of our study also show that ankle control may be an important factor for whole body balance improvement. According to COP results that are recorded at 1., 6., 12. and 24. months in 2 years period, after 6 months balance

<sup>&</sup>lt;sup>1</sup> Marmara University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Marmara University Faculty of Medicine Department of Physical Medicine and Rehabilitation

control improvements have become slower in two hemiplegic children. This condition, more than discussing long term effects of programs, shows the importance of first 6 months period for reaching the targeted goal.

The children with lower scores before training were demonstrated more increase in their curl up test. For example, one subject who had 21 curl ups (D3) before training program was able perform 41 curl ups after training (90%). Also one child that could do 60 curl ups before training program was able to perform 75 curl ups, which is a full score, after training. This success rate in curl up test may indicate the positive effects of exercise program on abdominal muscles of subjects. Increased hip flexion, thereby shortened abdominal muscles in children with cerebral palsy shows the importance of well planned abdominal exercise to increase balance ability in this group. Hand grip strength was increased in all children after six months exercise program. However, in the children who can't press the hand dynamometer or who have low pressure value had less improvement. The short term of this program may be the reason of this situation. Additionally, the reason of less improvement can be linked to children with lower grasp ability, because they may not use their hands functionally during the exercise activities. Because of the absence of any specific exercises for aerobic endurance, there were no significant improvements recorded in 6 minutes walk test after six months exercise program. Due to small number of subjects in this study, it is hard to come up with a general conclusion.

Keywords: Children, Cerebral Palsy, Exercise, Performance

### PP. 710 THE EVALUATION OF MULTIPLE INTELLIGENCES THEORY PHYSICAL EDUCATION AND SPORTS STUDIES ON ACCOUNT OF CONTENT ANALYSIS

Erhun Tekakpınar <sup>1</sup>, <u>Figen Yaman Lesinger</u><sup>2</sup>

#### Abstract

This research has been carried out aiming to evaluate the theory of multiple intelligences, physical education and sports studies in account of content analysis. The research is a documentary screening type study. Organizations using literature reviews and international networks like the internet were used to gather the research data. Principally, having carried out literature reviews from 'Ebsco, Sciene Direct, International Documentation Knowledge Screening Center' founded within the Council of Higher Education, two theses written on the theory of multiple intelligences, physical education and sports and also 34 magazine articles were found and the datum were obtained. In the statistics program with the 2 theses and 34 magazine articles that were evaluated the theory of multiple intelligences, physical education and sports studies publication type was classified according to the variables such as the year, grade, model, whether it was an individual or a group study, the language, the key words and what the institutes the people were bound to were then frequency and percentage charts were formed. As a result it appeared that the publication type of the studies was more of the article, the multiple intelligence studies had increased in the years 2007 and 2013, the English language was used more in the studies, the studies were carried out more in higher education level, sufficient research on this issue was not done in the institutes, group studies were more common and key words like multiple intelligence theory, physical education artificial intelligence, success were used more in studies on the multiple intelligence theory.

Keywords: Multiple Intelligence, Physical Education, Content Analyses, Success

<sup>&</sup>lt;sup>1</sup> Yakın Doğu University Department of Culture and Sports

<sup>&</sup>lt;sup>2</sup> Yakın Doğu University School of Physical Education and Sports

### PP. 60 THE COMPARISON OF AMATEUR AND PROFESSIONAL MALE ATHLETE LEISURE TIMES AND NON-ATHLETES

### Heidar Sajedi<sup>1</sup>

<sup>1</sup> Atatürk University Institute of Health Sciences

#### Abstract

The main aim of the study was to evaluate the comparison of amateur and professional male athlete leisure times and non-athletes of Ardabil City. The used method of the study was comparativecausative; the statistical community of the study is consisted of three athlete groups of amateurs and professional as well as non-athletes. The number of professional athletes was 50 people and about 74 ones were subjected to amateurs; also, non-athletes were taken up among 15-30 year-old people. Among each group 50 people were selected as sample group of the study. The applied method was a regulated accidental method for sampling the study. Shareki standard questionnaire including 5 questions and a reliable questionnaire composing of demographic data along with 9 questions about leisure time and 11 questionnaire about how-to-spend leisure times as well as 7 questions about leisure times and 4 questions about satisfaction level was used for collecting data in this regard. The validity of the related questionnaire was confirmed by the related professors; and cronbach alpha reliability coefficient including the following items: the questions about degree of leisure times 0.78, how-tospend leisure times 0.73, and satisfaction level was 0.81. SPSS Software was used for data analysis and to evaluate the hypotheses the k-square and single variance analysis were applied efficiently. The findings represent the fact that there is a significant difference between professional and amateur athletes and non-athletes of Ardabil City. (p=0.001). And the degree of non-athlete leisure times is higher than professional and amateur athletes. (p=0.001). There is a significant difference between professional and amateur spending leisure times and non-athletes. (p= 0.001). Sport is the most common leisure time for athletes among professional and amateur athletes. (p=0.001). There is a significant difference between satisfaction level of professional and amateur people with non-athletes in Ardabil City and the degree of satisfaction of amateur athletes is higher than professional and nonathletes. The distribution and publication of public sport and given sport cultural affairs can be a great foundation in the field of sport issues for the whole officials to make their best tries for non-athlete people filling their leisure times after hard working practices and workouts in this regard.

Keywords: Leisure Times, Professional Athlete, Amateur Athlete, Non-Athlete

### PP. 165 LEISURE TIME BEHAVIOR IN DIFFERENT CULTURES: "ARMENIAN SAMPLING"

Aytekin Hamdi Başkan<sup>1</sup>, Merve Karaman<sup>1</sup>, Suat Karaküçük<sup>1</sup>

<sup>1</sup>Gazi University School of Physical Education and Sports

### **Abstract**

### **Purpose**

There are many different groups of ethnical origin with different identity and believes in Turkey living in certain locations of the country as minority or majority and integrated with their country for centuries, shared good and bad times, succeeded in its development, and made an effort to live in a more modern, peaceful and prosperous way. Ethnical concept is defined as a different population category living in a larger community having a culture different than their own. "Ethnical identity" concept is used to express an identity type arising to bear structural characteristics of an original culture system in terms of characteristics, and being different than prevalent cultural elements of the community in which individuals live in (Önder, 2008). Ethnic groups are defined as people who share the identity sense introduced by a sub group within a common culture and large society. Narrol, who evaluated ethnical groups as "social categories formed as a result of definitions made about the groups in which social actors live", defines ethnical group as societal categories made of people who are

defined as belonging to an ethnical group by individuals and other individuals as ethnical groups who sustain their existence biologically (biologic); have some fundamental and common cultural values clearly (cultural); create an area where mutual communication and interaction exist (interaction) (Narrol, 1964). "Leisure time" wealth owned by each ethnical group wait to be examined. These studies are important for the integrity of society and for country, and also for their own groups. In this study, it is aimed that said leisure time behaviors are examined in the Armenian sampling for revealing leisure time behavior in different cultures as their certain dimensions and for determining characteristics for leisure time perception of cultural structure on this basis.

#### Method

32 persons, 14 men and 18 women, living in the only Armenian village in Turkey connected to Samandaği county of Hatay and being Catholic Christians participated in the study. Semi-constructed interview forms prepared based on expert opinions and literature was used to determine leisure time behavior of the participants. In the interview form, in addition to the personal information, there were questions to determine the time spent for vital needs of the participants and how they make use of their remaining times. The researchers were hosted in Vakıflı Village for 4 days and the data were obtained in one-on-one interview.

Content analysis, one of research methods, was applied to the data. In depth study was conducted after deciphering of interview records, and data codes were formed and themes were revealed.

#### Findings

As a result of the analysis of the interviews held with the members of the Armenian community, two main themes were revealed as activities originating from the Armenian culture and related to Armenian and Christian-living in general and including watching TV, shopping, doing exercises, going to coffee houses, engaging in agricultural activities and house works.

In the study under the themes, men indicated that they make use of their leisure time by playing games in coffee houses generally, women, on the other hand, said that they do house work and watch TV shows during their leisure times. Furthermore, men work in business most of the time, women give information to their children about their culture and community in which they are members. The reason for this is to make sure that children will continue this culture in the future and never forget about it. When the age variable is evaluated, older individuals spend their leisure times by playing games at coffee houses or by talking, and young individuals work out in a certain level, hunt and engage in artistic activities.

### Result

There was no difference observed in recreational habits of citizens living in different cultures in Turkey and Armenian Community sampling. Participants mention that they maintain a mutual life with various ethnical and belief groups naturally within time and that they do similar activities since they grew up in the same culture. They pursue a goal to teach things to their children in order to reflect something from their own culture in the process of recreational process. As a result, it is observed that standardization was made as a result of acculturation in recreational activities of ethnic and belief groups, however, it was attempted to keep the cultural differences alive by a certain consciousness. According to this result, it is important keeping the cultural differences alive, teaching them to new generations and taking measurements for the wealth arising from differences not to be lost.

Keywords: Leisure Time, Cultural Background, Armenian Culture, Ethnic Origin

### PP. 190 PRIMARY AND SECONDARY TEACHERS'S AWARENESS ABOUT THE CONSEPT OF RECREATION (SAMPLE OF IZMIT COUNTY)

Canan Öner<sup>1</sup>, Elif Karagün<sup>1</sup>

### **Abstract**

**The Purpose:** The purpose of this research is to determine Primary and Secondary School teachers's in Izmit, Kocaeli Province knowledge about the word ' recreation '. Have they ever heard about

<sup>&</sup>lt;sup>1</sup> Kocaeli University School of Physical Education and Sports

'recreation'. If they heard about it, do they know the meaning of it. And also to determine their awaraness about the topic.

**The Method:** This research is a descriptive study. The population of the study is constituted in 2013-2014 academic year by teachers working at the Primary and Secondary School class in Izmit county. The sample group of this study is constituted of 200 teachers in total including the 80 class teachers and 120 branch teachers that work at the Primary and Secondary Schools of Kocaeli Province, Izmit District National Education Directorate in 2013-2014 academic year. This study is based on voluntariness. The questionnaire was not made to the teachers who are absent in the questioannaire day and who aren't willing to answer.

For selecting the sample , first permission was given from Izmit District National Directorate and numbers of schools and teachers were determined. With randoms methods from 22 schools, 8 Primary Schools and 7 Secondary Schools that are based in the city center and closed to recreation areas were selected. Verbal permission was given from managements of schools, the questionnaire was made in break times to 80 Primary School and 120 Secondary School and 200 teachers in total that are volunteering.

The Preparation Of The Questionnaire: Firstly, the topic of question list was determined after discussing with the 10 teachers based on their thoughts and opinions about recreation. After that, a literature review was made and a question pool was constituted. The most appropriate questions were selected with reference of expert opinion and expert assessments. Totally 19 item questionnaire, including 6 questions that evaluate the social economic status of the teachers and 13 questions to evaluate their recreation knowledge was constituted. Teachers's personal characteristics and the frequency of their responses and percentage distributions were calculated.

**Evidences:** In total 200 teachers including 80 class teachers, 19 Turkish, 18 English, 15 Math, 11 religion, 18 science, 11 technologic design, 13 social science, 4 guidance, 3 information technologies and 2 music teachers attended to research. 82(%41)of the teachers were male,118(%59)of them were female.

The Teachers's age ranges were 37(%18.5) between 23-30 ,81(%40.5)between 31-40,43(%21.5)between 41-50, 39(%19.5)between 51-61. 63(%31,5) of the teachers have just one child; 68(%34) of them have 2 children; (%5,5) of them 3 and (%1,5) of them have 4 and above children. The monthly incomes are; 5(%2,5)of them between 1000-1500 TL; 19(%9,5) of them between 1500-2000 TL; 172(%86)of them earn 2001 TL and above .131(%65,5) is the percentage of the teachers whose wives/husbands also work and 32(%16,5) is the percentage of the wives/husbands who don't work .54(%27) of the teachers do sportive activities regularly; 145(72,5) of then don't do any exercise .80(%40) of the teachers work at Primary School and 120(%60) of them work at Secondary School. 105(%52,5) of the teachers said that they heard about the recreation word before and 93(46,5) said that they have never heard about it before. I

n the process of questionnaire preparetion ,according the teachers thoughts; recreation is mistake for something different or they get confused . According to the evidences; 107(53,5) of the teachers informed that they heard about the recreation word before but don't have enough information about it. 51(%25,5) of the teachers informed that they have never heard about it before . The percentage of the teachers who said i have enough information about recreation is  $20((\%10).170\ (\%85))$  of them informed that they dont have any idea about it. 4(%2) of the teachers responded that 'recreation is a religious term and 159(79,5) of them responded that it's not about the religion.

41(%20,5) of the teachers responded the question ?is recreation something about art ? As' yes' and 115(%57,5) of them responded as 'no'. 90(%45) teachers said 'yes' for the question Are recreative activities done in free times ? 66(%33) of them said 'no' . 32(%16) teachers said that recreation is a scientific area and 32(%16) of them said 'no' it's not a scientific area . 24(%12) of teachers said that recreation is an entertainment and 127(%63,5) of them said that it's not about entertainment . 79(%39,5) of the teachers said that recreation is the name of the parks and yards ;67(%33,5) said 'no' it's not the names of the parks and yards . 27(%13,5) said that recreation is s game ; 121(%60,5) said 'no' it's not a game.

**Conclusion:** Legally required and according to convention on the rights of the children; the school activities must include recreation. Also this research conclusions showed that teachers are not conscious of recreation enough although the syllabus include the activity class. According to the conclusion of thies research; it's very important to give demonstrations about recreation either at

schools or to every region of the society.

Keywords: Awareness of Recreation Consept, Class Teacher, Branch Teacher, Primary School Teacher, Secondary School Teacher

### PP. 220 EXAMINING OF POTENTIAL OF SPORTS TOURISM IN ANTALYA, BELEK

Tahir Kılıç<sup>1</sup>, <u>Abdullah Arısov</u><sup>2</sup>, Tuba Dik<sup>1</sup>

- <sup>1</sup> Akdeniz University School of Physical Education and Sports
- <sup>2</sup> Süleyman Demirel University Yalvac Vocational School

### **Abstract**

Our research includes in total 17 selected hotels which have been invested in sports tourism in Antalya, Belek. Interviews were recorded by using data gathering form which created by researcher. The purpose of this research paper is to collect information about the current potential of sports tourism in Antalya, Belek which is quite popular in recent years. As information gathering tool, a questionnaire which is consisting of 10 questions has been created and has been interviewed face to face with those 17 hotels which one can be achieved. Information about those hotels which cannot be achieved has been collected by using phone or internet sites.

In results of our research, number of teams who are using hotels for camping is 40,00±10,69, number of daily users of sportive areas in the hotels is 145,00±37,06, and average salary of employees who work at sportive areas in the hotels is 1593,75±457,69.

Generally teams which come from aboard excel expectations like preparing their own menus according to nutrition programs, fitness center of hotels should be supported with employees who is better qualified and expert in their field and request for training materials. Also teams come with their own sports directors, trainers, conditioners, masseur and outfitter. Antalya, belek is able to let camping for 2000 teams in a year. Teams like especially football, golf, athleticism, water sports are also using the area for camping.

As a result, Antalya, Belek in terms of sports tourism to be the shining star of Turkey and to create new business opportunities for physical education and sport college graduates has attracted attention as a candidate region. Enterprises in the region have announced plans to invest in the coming years and have achieved considerable development.

**Keywords: Sport Tourism** 

# PP. 235 EXAMINATION OF THE RELATIONSHIP BETWEEN PARTICIPATION IN RECREATIONAL ACTIVITIES, LEISURE SATISFACTION, PSYCHOLOGICAL WELLBEING AND LIFE SATISFACTION IN UNIVERSITY STUDENTS (AKDENIZ UNIVERSITY EXAMPLE

### Evren Tercan<sup>1</sup>

### **Abstract**

### Aim:

The aim of this study is to examine the relationship between participation in recreational activities, leisure satisfaction, psychological well-being and life satisfaction. The research has a relational screening model and a cross-sectional design.

### **Method:**

The sample of the study consisted of 800 students (with a mean age of 21.87±1.91) selected randomly from 3625 students taking elective physical education lectures. Sample size was based on the formula

<sup>&</sup>lt;sup>1</sup> Akdeniz University School of Physical Education and Sports

n=Nt2pq/d2 (N-1) + t2 pq (Sumbuloglu & Sumbuloglu, 1995), n was calculated as 347, in order to prevent the data loss, 800 individuals were taken into the sample.

Data collection was a questionnaire form consisting of five sections. First section consisted of demographic variables, second consisted of questions of recreational activity participation. In the third section, leisure satisfaction scale which was developed by Beard and Ragheb (1980) and adapted to Turkish by Karlı et al. (2008) was used. The scale included 39 questions with 5th Likert type divided into psychologic, education, social, relaxation, physiologic and aesthetics subscales. In this current study, the reliability coefficients ranged between .82-.93. The fourth part of the questionnaire consisted of "The scales of psychological well-being" developed by Ryff (2008) and adapted to Turkish by Akın (2008). The scale included 84 items with 6th Likert Type divided into 6 subscales named autonomy, environmental mastery, personal growth, postivite relationships with others, purpose in life and self-acceptance. In this current study, reliability coefficients were between .66-.86. The last part of the questionnaire consisted of Satisfaction of Life scale developed by Diener et al. (1985) and adapted to Turkish by Koker (1991). The scale consisted of 5 questions with 7th Likert type and reliability coefficient was found to be .87.

In data analysis, descriptive statistics, Spearman correlations coefficients, Mann Whitney U test and Logistic regression were utilized.

### **Findings:**

According to the data analysis, positive significant correlations were obtained between leisure satisfaction, life satisfaction and psychological well-being. The highest correlation coefficients were between life satisfaction and psychologic subscale (r=.315, p<0,001) and positive relationship with others and relaxation (r=.399, P<0,001) subscales.

In the comparisons according to leisure participation duration, the group with a higher level of participation obtained higher means from life satisfaction, autonomy and purpose in life subscales. Additionally the group with a higher frequency of participation obtained higher scores from life satisfaction.

The contribution of psychological well-being and leisure satisfaction to the duration, frequency and type of participation was also inquired by logistic regression. According to the results, the duration of participation in recreational activities was affected by environmental mastery and purpose in life. The factors affecting frequency of participation were environmental mastery, personal growth and relaxation. Factors affecting active participation in sport were personal growth, postivite relationships with others and physiologic subscales.

### **Result:**

As a result, it is shown that the level of satisfaction in leisure had a positive correlation with life satisfaction and psychological well-being. In groups with higher duration and frequency of participation, life satisfaction was significantly higher. These results were compatible with the results obtained from studies in literature (Brown & Frankel, 1993; Hawkins et al., 2004; Rodriguez et al., 2008). In the group with higher level of participation autonomy and purpose in life mean scores were obtained higher. These findings were in parallel with Edwards et al. (2005) study. It was also found out that various subscales of psychological well-being had positive contribution in recreational activity participation.

New studies conducted in wider samples, utilizing more developed analysis techniques are expected to yield more detailed findings.

Keywords: Recreation, Leisure Satisfaction, Psychological Well-Being, Life Satisfaction

### PP. 294 EXAMINATION OF TIME MANAGEMENT SKILLS OF UNIVERSITY STUDENTS

Halil Sarol <sup>1</sup>, <u>Serkan Kurtipek</u> <sup>1</sup>, Sabri Kaya <sup>2</sup>, Hamdi Alper Güngörmüş <sup>3</sup>

<sup>1</sup> Gazi University School of Physical Education and Sports

<sup>2</sup> Kırıkkale University School of Physical Education and Sports

<sup>3</sup> Ağrı İbrahim Çeçen University School of Physical Education and Sports

### **Abstract**

### **Objective**

The purpose of this research was to examine time management skills of university students and to compare these skills with respect to some demographic (gender, age, academic program) variables.

#### Method

A total of 202 university students (n<sub>men</sub>= 125; M<sub>age</sub>= 21.65 yr., SD= 2.53 and n<sub>women</sub>= 77; M<sub>age</sub>= 22.26 yr., SD= 2.51) provided responses to this study. Time management skills were examined using "Time Management Questionnaire" (TMQ) developed by Britton and Tesser (1991). The reliability and validity of the Turkish version of the "Time Management Questionnaire" (T-TMQ) were determined by Alay and Koçak (2002). The T-TMS consists of 27 items and 3 subscales named as (a) Time Planning, (b) Time Attitude and (c) Time Wasters, and each items answered a five-point Likert type scale (1=Always, 5= Never). Multivariate Analysis of Variances (MANOVA) and Pearson Correlation Coefficient tests were used to analyse data. Furthermore, Cronbach's alphas were calculated for the subscales and total scale in order to evaluate their internal consistency for this study. The level of significance was taken as a 0.05.

#### **Results**

Findings indicated that the total scale mean score and standard deviation for all participants were 2.21 and 0.43 respectively. For the subscales, while the lowest mean score was in the 'Time Attitudes'  $(2.40 \pm 0.53)$  subscale, the highest mean score was in the 'Time Wasters'  $(3.25 \pm 0.77)$  subscale. Whereas, results from the MANOVA indicated that there was no significant main effect of age  $[\lambda=0.969, F(3, 198)=2.14, p>0.05]$  for any of the subscales of T-TMQ, in tests between subject effects by age, results showed a significant differences in the 'Time Planning' subscale [F(1, 200)=5.56, p<0.05] and total scale [F(1, 200)=6.29, p<0.05]. 18-22 year age group participants had higher mean scores than  $23 \ge$  year age group.

The results of analysis indicated there was significant main effect of gender [ $\lambda$ =0.959, F(3, 198)=2.80, p<0.05] on T-TMQ subscales. ANOVA analysis revealed statistically significant differences only in 'Time Wasters' subscale [F(1, 200)=7.31, p<0.05]. The women had higher mean scores than the men. On the other hand, academic program had no significant main effect on the all subscales of T-TMQ (p>0.05). Furthermore, significant negative correlations were obtained between 'Time Planning' (r=0.16, p<0.05) subscale scores and total scale scores (r=-0.18, p<0.05).

### Conclusion

Overall, it can be said that, the time management skills of the participants were over the medium level. Women participants' revealed better time management skills than the men except from 'Time Wasters' subscales. Furthermore, as the participants' age increased the participants' time management skills scores decreased.

Keywords: University Students, Time Management, Gender

### PP. 312 LIFE SATISFACTION AND JOB SATISFACTION: IN RELATION TO RECREATIONAL PHYSICAL ACTIVITY

Halil Sarol<sup>1</sup>, İsmail Aydın<sup>2</sup>, Bülent Gürbüz<sup>3</sup>, Zafer Çimen<sup>1</sup>

### **Abstract**

### **Objective**

The purpose of this research was to examine relationship between life satisfaction, job satisfaction and physical activity participation, and to compare differences in life and job satisfaction with respect to some demographic variables.

### Method

The participants of this descriptive research were 168 male ( $M_{age} = 30.70 \pm 6.91$ ) and 134 female

<sup>&</sup>lt;sup>1</sup> Gazi University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Bartın University School of Physical Education and Sports

<sup>&</sup>lt;sup>3</sup> Kırıkkale University School of Physical Education and Sports

 $(M_{age} = 29.78 \pm 6.19)$  from different occupational groups. The "Demographics Form", "Life Satisfaction Inventory" (LSI), and "Minnesota Satisfaction Questionnaire" (MSQ) were used to collect data. The LSI which was originally developed by Diener et al., (1985) and adapted into Turkish culture by Yetim (1993) to assess the life satisfaction of individuals. It consists of 5 items and all items were measured by using 7 point Likert type scale ranging from (1) 'Strongly Disagree' to (7) 'Strongly Agree'.

Job satisfactions' of the participants were examined by using "MSQ" which was developed by Weiss et al., (1967). The reliability and validity of the Turkish version of the "T-MSQ" were determined by Baycan (1985). The "T-MSQ" consists of 20 items and 2 subscales named as (a) intrinsic satisfaction, and (b) extrinsic satisfaction. The participants asked to rate each item on 5 point Likert Scale (1=Very Dissatisfied, 5= Very Satisfied). Independent samples t-test, One Way of Analysis of Variance (ANOVA), Multivariate Analysis of Variances (MANOVA), Pearson Correlation and Spearman Rank Order Correlation analysis were used to analyse the collected data. For this study, Cronbach's Alphas were also used to test the internal consistency of both of the scales (Cronbach, 1951). The level of significance was taken as a 0.05.

### **Results**

The "T-LSI" scores of the participants did not differ significantly with regard to gender (p>0.05). Whereas, results from the MANOVA indicated that there was significant main effect of gender on "T-MSQ" scores [F(2, 299)=1.553, p<0.05], in tests between subject effects by gender, results also revealed a significant differences in the "Extrinsic Satisfaction" [F(1, 300)=3.093, p<0.05], "Intrinsic Satisfaction" [F(1, 300)=0.850, p<0.05] and total scale [F(1, 300)=2.415, p<0.05]. The women had higher mean scores than the men in both of the subcales and total scale. There was no significant main effect of frequency of physical activity participation on "T-LSI" and "T-MSQ" scores (p>0.05). A significant positive correlations were obtained between "T-LSI" scores and "T-MSQ" subscales scores (p<0.01). Whereas, the results of Spearman correlation analysis indicated no significant relationship between frequency of physical activity participation and "T-MSQ" scores (p>0.05), there were significant and positive relationship between frequency of physical activity participation and "T-LSI" scores (p<0.01).

### Conclusion

Overall, it can be said that, the life satisfaction and job satisfaction of the participants were over the medium level. While the women had lower life satisfaction level, their job satisfaction level were higher than men. Furthermore, it was found that; the more physical activity participation, the higher life satisfaction. This study was conducted on limited participants which was the main limitations of this research. For that reason, it is suggested that in the future studies to increase the number of participants from different demographic characteristics may contribute the literature more.

Keywords: Physical Activity, Recreation, Life Satisfaction, Job Satisfaction

### PP. 353 HOUSEWIVES SITTING IN MUGLA ULA HABITS OF FREE TIME INVASTIGATION

Fahri Akçakoyun <sup>1</sup>, Efecan Tezcan <sup>1</sup>, <u>Vedat Mutlu</u><sup>2</sup>

#### **Abstract**

In this study, residing in the district of Muğla Ula free-time habits of housewives aimed to investigate. Ula district of Muğla Province in the face, provided on a voluntary basis as the participation of housewives from this survey can be considered an inventory of 60 women were taken as feedback. Inventory information obtained from the survey were converted into numerical expressions, and was transferred to the SPSS program. Obtained to assess the percentage and frequency analysis were performed. Free-time habits for researching the developed survey a total of 11 questions is located, these questions five personal characteristics to determine the remaining 6 question is, recreational

<sup>&</sup>lt;sup>1</sup> Mugla Sıtkı Koçman University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Siirt University School of Physical Education and Sports

activities form of participation, duration, preferred activities, preference causes, join causes and events has left traces to identify is directed.

Research findings; ladies effectiveness of reasons to choose Considering (33.3%) patients more money does not require, (30%) the ability to be appropriate and will not give, because (18.3%) patients 'health reasons' (11% 7) physicians work environment to get away from, and a social environment, to ensure (6.7%) physicians if I want to activities in the field of facilities and equipments enough groove to form answers given can be seen. Participants (66.7%) have economic failure, without (18.3%) of relevant agencies cater to it because it does not (6.7%) have free time, a certain activities such as filling out a habit that are not attending the event said they did. Ladies Looking at the traces left on the event; Of 55% (resting), 21.7% of the (entertaining), 10% of (my health remains), 8.3% (social status and environmental good in my relationships provide), and 5% (different experiences provide) in the form were found to respond. (56.7%) patients usually family events, (26.7) 's usually attended alone, (16.7) have reported that the event is usually attended the event with friends. When we look at the kinds of activities usually 50% of the market research group on Sunday, fairs, park-like rides that go up to 30% of the skilled crafts and art generally has been shown to deal with.

As a result; When the findings are considered 'CONTACT' Housewife residing in the district is generally low economic levels can not attend the event, or they can join a limited period of time has emerged. Authorities such underdeveloped regions or districts Housewives everyday have to do their work, except for free can join event space create Abilirlerse, as well as social activity, diversification and addressing them in a way that worry is necessary. Facilities regulated in this way, if a woman's depressed state of mind helps you to get rid of, this positive family environment at the same time, as will be reflected in a general atmosphere of peace can be achieved.

**Keywords: Housewives, Leisure Time, Activity** 

### PP. 404 DANCESPORT ETHIC CODES: A SITUATION ANALYSIS STUDY

Hüseyin Cevik<sup>1</sup>, Kerem Yıldırım Simsek <sup>1</sup>

#### **Abstract**

Dance turned into genuine sport at the beginning of the twentieth century, when French entrepreneur Camille de Rhynal and a group of superb dancers added the competitive to the social, and when they converted ballrooms into the venue for their contests (http 1). Today, the DanceSport comprises a wide variety of dance styles and forms within an internationally recognized and organized competition structure (Chu ve Wang, 2012, s.755). Today, DanceSport events are organized by WDSF (World DanceSport Federation) and IDO (International Dance Organization) (http 2). Especially in recent years it has been seen that the DanceSport as Olympic discipline is aimed at becoming a part of Olympic games. The purpose of this study is to evaluate DanceSport ethic codes of IDO ,aiming to arrange world championships and competitions among the continents for not only amateur dancers but also professional dancers, and ethic codes of WDSF.

When we analyze IDO's ethic codes, it is understood that ethic codes of IDO aim to organize a good competition. One of the most important ethic codes is that environment, where the competition is held in, must be kept clean and tidy and also competitors must always act in a dignified manner while attending any IDO event, both on the competition premises and while in a hotel, restaurant or other facilities. The other ethic code is about attitude and actions which may be understood by nations and spectators. During a competition the dancers must avoid such an attitude and action (IDO, 2013, s. 97). Briefly, it can be understood that creating possitive dance image is important for IDO. Ethic codes which are determined by WDSF are mostly related to fighting against doping and adherence to the contest rules (WDSF, 2012, s. 3).

Anti-doping is one of the most important topics for International Olympic Committee (IOC). It can be an indicator for DanceSport as a olympic discipline, aiming at becoming a part of Olympic games to give mostly place the rules related to anti-doping.

### Result

<sup>&</sup>lt;sup>1</sup> Anadolu University Faculty of Sport Sciences

As a result, the ethic codes of DanceSport stated by WDSF and IDO are different from each other as well as there are some characteristics in common. It is thought that ethic codes stated by only one institution are insufficient when all ethic codes are evaluated.

### Suggestion

In this study, it is suggested that IDO should state the ethic codes related to anti-doping to create more positive image of DanceSport On the other hand WDSF should state ethic codes related to create positive dance image. To sum up it is recommended that ethic codes should be reevaluate.

**Keywords: Dancesport, Ethic Cod** 

### PP. 429 EXAMINING RECREATIONAL EXERCISE MOTIVATION FACTORS OF INDIVIDUALS AT SPORT CENTERS

Osman Gümüsgül<sup>1</sup>, Ümit Dogan Ustun<sup>1</sup>, Emine Pınarbası<sup>1</sup>, Jale Soylu<sup>1</sup>

<sup>1</sup> Dumlupınar University School of Physical Education and Sports

### **Abstract**

#### Aim

The aim of the study is to examine recreational exercise motivation factors of individuals at sport centers according to different variables.

### **Matherial and Method**

To gather the data for the research, the demographic information forms and Recreational Exercise Motivation Measure (REMM) created by Rogers and Morris (2003) have been used. Recreational Exercise Motivation Measure was translated to Turkish language by Gürbüz, Aşçı and Çelebi. The Turkish version of REMM consists of five subscales, namely; health, competition/ego, appearance, social and enjoyment, and skill development.

### **Sample Group**

Sample of research has been described as 196 participants (120 male, 96 female) exercising at sport facilities in Kütahya.

### **Statistical Analysis**

SPSS 20.0 has been used to analyse datas collected. First of all, Kolmogorov-Smirnov normality test has been applied and identified that datas has statistically normal distribution. Along with descriptive statistics; frequencies and percentage analyses, Independent Sample T-Test and One Way Anova tests have been applied. Statistically significance level was takes as 0,05.

### **Findings**

According to T-Test results applied to determine if there have been any significant differences related with genders, participants' weekly free time situation and marital status; significant differences of recreational exercise motivation measure scores related to gender variable and participants' weekly free time situation variable have not been determined (p>0,05). According to ANOVA results for recreational exercise motivation measure scores of participants, it was statistically determined that there were significant difference by frequency of using the facilities (p<0,05).

### Results

While gender and free time participants have not played role on motivating to recreational exercise, marital status has significant role on recreational exercise motivation. The reason of this has been thought that individuals have more daily duties after marriage and they can not create time for recreational exercises.

**Keywords: Recreation, Recreational Exercise, Motivation, Sport Centers** 

### PP. 504 THE INVESTIGATION OF EXTREME SPORTMENS STATE-TRAIT ANGER EXPRESSION

Merve Ceylan<sup>1</sup>, <u>Fahri Akçakoyun</u><sup>1</sup>

### **Abstract**

**Objective:** The purpose of the present study was to explore extreme sportsmen anger expression style. **Method:** data was collected using State- Trait Anger Expression Inventorys (STAXI). STAXI was developed by Spielberger (1983) and the Turkish reliability and validity study was conducted by Özer (1994). STAXI is a self-rating scale with 34 items, which measures the experience and expression of anger. The study was carried out 121 extreme sportsmen and 54 team player. Data analysis was collected by using SPSS.

**Results:** Analyzing data shows that there is an significant difference between extreme sport athletes and team players in point of anger-in, anger-out and anger control scores. At the same time there is a difference between age groups and gender about continuous anger and anger control

**Conclusion:** The results show that extreme sportsmen have lower trait anger, however, their anger-in throwing and they can keep their anger under control. Between 22 to 27 years the trait anger levels are low and women compared to men, it is observed that higher levels of trait anger.

Keywords: Extreme Sports, Anger, Anger Expression

### PP. 511 COMPARISON OF LEISURE TIME ATTITUDES OF UNIVERSITY STUDENTS BY DIFFERENT VARIABLES

Ersan Tolukan<sup>1</sup>, Hamdi Alper Güngörmüş<sup>1</sup>, Halil Sarol<sup>2</sup>

### **Abstract**

### **Objective**

This study aims to assess leisure time attitudes of university students by some demographic variables (sex, age, grade, welfare level, leisure time period, difficulty in making use of leisure time, sufficiency of recreational areas in the university and leisure time places).

### Method

The research population consisted of people who take undergraduate education at Ağrı İbrahim Çeçen University; sampling group consisted of randomly selected 509 people being 279 male (54,8%) and 230 female (45,2%). "Leisure Attitude Scale" (LAS) developed by Ragheb and Beard (1982) and adopted into Turkish and tested for validity and reliability by Akgül and Gürbüz (2010) was used to collect data. In Turkish version of the scale, there are 36 items and 3 sub-dimensions titled (a) cognitive, (b) affective and (c) behavioral having equal distribution (each has 12 items). Statements in the scale were assessed through 5-point Likert-type scale arranged as (1) Strongly Disagree and (5) Strongly Agree. T-test and ANOVA tests were used for correlated samples to analyze the obtained data.

### **Findings**

At the end of the analyses, a difference was found in affective  $[t_{(507)}=1,877, p<0,05]$  sub-dimension while no difference was found in cognitive and behavioral sub-dimensions of Leisure Time Attitude Scale in the assessment by sexes of children.

According to the results of ANOVA analysis conducted by the grade variable, it was found that a significant was found in cognitive [F(3-505)=8,729; p<0,05] and affective [F(3-505)=3,642; p<0,05]

sub-dimensions of the scale (this difference was between 1<sup>st</sup> grade ( $\overline{X} = 3,20$ ) and 2<sup>nd</sup> ( $\overline{X} = 3,54$ ),

<sup>&</sup>lt;sup>1</sup> Mugla Sıtkı Koçman University School of Physical Education and Sports

<sup>&</sup>lt;sup>1</sup> Ağrı İbrahim Çeçen University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Gazi University School of Physical Education and Sports

 $3^{\text{rd}}$  ( $\overline{\boldsymbol{X}} = 3,62$ ),  $4^{\text{th}}$  grades ( $\overline{\boldsymbol{X}} = 3,77$ ) in cognitive sub-dimension; between  $1^{\text{st}}$  grade ( $\overline{\boldsymbol{X}} = 3,37$ ) and  $4^{\text{th}}$  grade ( $\overline{\boldsymbol{X}} = 3,70$ ) in affective sub-dimension).

It was also found that, a significant difference was found in affective sub-dimensions of the scale by welfare level variable [F(4-504)=2,698; p<0,05] and this difference is between those who consider

their welfare level as poor ( $\overline{\boldsymbol{X}} = 3,74$ ) and others who consider welfare level as normal ( $\overline{\boldsymbol{X}} = 3,48$ ).

At the end of the analysis conducted by sufficiency of the recreational areas at the university, it was found that there is a differentiation in cognitive [F(4-504)=3,001; p<0,05] and affective subdimensions [F(4-504)=2,566; p<0,05] and this differentiation is between those who consider the areas

as insufficient ( $\overline{X} = 3,71$ ) and others considering as partially insufficient ( $\overline{X} = 3,45$ ) in cognitive sub-

dimension; between those who consider the areas as insufficient ( $\overline{X} = 3,67$ ) and others considering as partially insufficient ( $\overline{X} = 3.42$ ) in affective sub-dimension.

According to the results of ANOVA analysis conducted on other variables used in the study (age, leisure time period, difficulty in making use of using leisure time and students' use of leisure time in and out of campus), it was found that there is no difference in the Leisure Attitude Scale.

#### Conclusion

In general sense, it was found that students expressed the insufficiency of recreational areas in the university, have difficulty and limitation to make use of their leisure time and thus they use their leisure time mostly with passive in-house activities. It can be said that as the time students spent at university increases, their positive tendency towards leisure time attitudes both in and out of campus increases as well.

We can say that recreational area planning in campus should be prioritized for the foundation of new universities; activities should be incited through certain units in order to improve the adaptation of future students and the positive change of students who still take education.

Keywords: Attitude, Leisure, University Student, Campus

### PP. 584 RECREATIONAL ACTIVITIES IN CRIME PREVENTION AND REDUCTION

Caner Özgen<sup>1</sup>, Velittin Balcı<sup>1</sup>

#### Abstract

The purpose of this study is to define, to look in to history and to analyze efficacy of recreation towards prevention of crime and to explain why recreation should be used. During this study review method was utilized.

People living together are the biggest evidence that humans are social creatures. Crime is a common problem in all societies which makes people unhappy and makes them feel frightened and nervous. Since humans, reduction of crime rates and trying to stop it has been the main concern in all societies. The cost of trying to end crime is the same as the cost of crime and its damage. The main objective of recreation is not to prevent and reduce crime however, it is thought that it could be effective to reduce crime rates and prevent it. During the research it was discovered that recreational activities had a great effect on relaxation, socialization and to realize hidden skills of human beings. In this point of view to prevent and reduce crime the participation to recreation becomes more important. In addition it is not a coincidence that there is a link between participation to recreation and low crime rates which also a proof of civilization.

After other studies were examined it was obviously seen that in areas which recreation activities were used crime rates were lower. Especially knowing that crime becoming personality during teens sportive recreational activities were used during this period. Recreation activities were more effective on children. In conclusion after examining quantitative and qualitative studies it was considerably seen that recreation was the most effective and economic way to reduce and prevent crime.

**Keywords: Crime, Recreation** 

<sup>&</sup>lt;sup>1</sup>Ankara University Faculty of Sport Sciences

### PP. 595 LEISURE TIME ATTITUDES OF ANKARA POLICE COLLEGE STUDENTS

Zafer Celik<sup>1</sup>, Zafer Cimen <sup>2</sup>

<sup>1</sup> Police Academy Sivas Police Vocational College

<sup>2</sup> Gazi University School of Physical Education and Sports

### **Abstract**

Purpose

The aim of this study was to determine attitudes of Ankara Police College students toward the leisure activities.

Methods

Population of this study was 1,215 Ankara Police College, students and 830 randomly selected volunteer students were consisted the sample of the study. Leisure attitude scale which was developed by Ragheb and Beard used as a data collection tool. Turkish version of the Population of this study was 1,215 Ankara Police College, students and 830 randomly selected volunteer students were consisted the sample of the study. Leisure attitude scale which was developed by Ragheb and Beard used as a data collection tool. Turkish version of the "Boş Zaman Tutum Ölçegi:(BZTÖ)" was conducted by Akgül ve Gürbüz. For this study, the internal consistency coefficient was determined between 0.83 and 0.87. Kolmogorow-Smirnov Z, Kruskal-Wallis and Mann-Whitney U statistical methods were used for statistical analysis.

### **Findings**

According to the analysis of datas; the highest mean scores in "cognitive sub dimension" (Avg. = 4.11), and lowest mean scores "behavioral sub dimension" (Avg. = 3.54) were observed. For determining differences in grade and leisure time difficulty variables according to the Leisure Attitude Scale Kruskal-Wallis test was performed. Leisure time attidue of Police College, students attidudes show meaningfull differences according to the grade (p <0.05) and leisure time difficulty (p <0.05). When compering leissure time attidudes according to the grades, it can be said that grade 9 students exhibited more positive attitudes towards the leissure time than the 10., 11., and 12. grades students (p <0.05). Mann-Whitney U test was performed to determine the sport club membership variables creates any difference on leissure time attitude. Considering the results of the analysis, the participants' attitude scores on all subscales (p <0.05) was showed meaningfull difference. Sport club membership creates positive attidude towards the leissure time.

### Results

In conclusion, it can be said that policee collage students have positive attidudes towards the leisure time activities. In addition to this, it was determined 9th grade students have exhibited more positive attitudes towards leisure time. An overall evaluation, it can be said that police college students exhibit an active recreational experience and they have positive attidude towards leisure time activities. As a result, when considering the difficulties of policing profession's and recreational participations positive efects, development of positive attidudes toward the leisure time activities for police collage students contribute affirmative effects during their career.

Gazi University, Institute of Health Sciences, Master Thesis, 2014

Keywords: Police College, Attitude, Leisure Time, Recreation

### PP. 599 KAHRAMANMARAS KIDS GAMES GRABBING SHOES

Abdullah Dogan<sup>1</sup>, Aydogan Soyguden<sup>2</sup>

- <sup>1</sup> Malatya Provincial Directorate of Youth Services
- <sup>2</sup> Hitit University School of Physical Education and Sports

### **Abstract**

### Aim

In this study; aimed to reveal the games of grabbing shoes where kids play in the town of Kahramanmaras Elbistan, record and contribute to the culture of a children games.

#### Method

In the study data collection techniques, face to face interviews and document-scanning technique were used. Rules of the game and types by one to one interviews with 10 male kids were identified.

### **Findings**

This game being played at the grassy areas with at least three people, as a game material sharpened a stick, 4 feet in length rope and used the players' shoes. The stick were nailed to the floor and one end of the rope tied to the stick. Including selected player with all of the players removing shoes and put on top of the stick. Selected player keeps the end of the rope. Other players try to get shoes without getting caught from selected player. If the selected player touches the one of the player without leaving the rope in his hand, that player becomes a selected player. Other players if grab the shoes without hit by a selected player, selected player go to a predetermined distance until selected player come back other players will hit with shoes to selected player. When selected player comes back to game area the game re-starts again.

### Result

As a result, in parallel with technological development from occurring erosion culture, traditional kids games were affected. The grabbing shoes game played by young boys until the 1990's in the rural areas of Elbistan but today was determined not played anymore.

Keywords: Game, Kids, Shoes, Kids Games

## PP. 637 ANALYZING THE BENEFITS OF LEISURE ACTIVITIES THAT ARE PRESENTED IN YOUTH CENTER ON THE YOUNG PARTICIPANTS INDIVIDUAL THOUGHTS

 $\underline{\text{Emre Bilgin}}^1$ , Suat Özfidan  $^2$ 

- <sup>1</sup> Hacettepe University Faculty of Sport Sciences
- <sup>2</sup> Anadolu University Faculty of Sport Sciences

### Abstract

### The purpose

Youth has a significant place on reaching to a high level of life of the society. It is thought that leisure time activities that are directly related to education system are important in order to that the youth grow up in a good way, carry out their duties and responsibilities. Youth centers are corporations that meet personal and social needs and make social, sportive and cultural organizations that the young do by choosing in the direction of personal request, tendency and skill in their leisure time by participating in the management (Karaküçük, 2001). In this research, it was wondered that whether the students in puberty who continued to the formal high school training before university life have enough information about leisure time activities or not, what kind of help they get about this subject, what the ones who participated in the leisure time activities think about these activities and how aware the ones who value their leisure time by getting service from youth center of what kind of benefits they get. This research aims at analyzing the benefits of leisure time activities that are presented in Youth Center on the young participants.

### Method

In this research, general screening model which is one of the descriptive research methods and descriptive statistic model were used. Within the research 'Leisure Time Satiation Scale' which was developed by Beard and Ragheb (1983) with the aim of determining the effects of leisure time services that are rendered to the youth on the youth's opinions intended to their own personal development was applied. In the direction of the aim of the research frequency and percentage distribution of the data was founded out and then it was tested with chi square test with the aim of finding the relationship or difference between related variances.

### **Findings**

At the end of the study, as a result of the activities that male participated at the rate of %51,8 of the male and %51.1 of the female, they think that leisure time activities create environments that they can share something with the other people. The young who lose their energy and break down because of the stress of the daily life feel better physically and psychologically in the consequence of the activities they participated. Moreover a lot big part of the young like %65.2 rate of them think that the activities they participated in the youth center are educational and beneficial. As a result of this study, it can be stated that students are aware of that their participating in the activities will contribute to both their physical development in their body and their social development. This result can be reached from the most of the participants' (%61) stating that leisure time activities help them with getting rid of the stress.

When the percentages are analyzed, %33.9 of the young between 15-16 age want to show their physical abilities and skills other people in the leisure time activities they participate; %60.9 of the young between 17-19 age think that the leisure time activities create the environments that they can share with the other people. This result shows that there is a difference between the young's thoughts about their social developments in accordance with the age of the young.

#### Result

Youth centers present environments to create a change for the young and the young who spend their time on participating the activities in the youth center relax by getting away from stress and pressure of the daily life and have a healthier mood. In the youth center the young socialize, show their abilities and develop physically and cognitively. This reinforces the one of the aims of the youth center foundation; to protect the young's mental and body health with social, sportive and cultural activities and strengthen the feeling of the national unity and solidarity. More studies should be done about leisure time and youth centers and their extents should be widened. Concordantly, in order to be formed a reliable and valid leisure time model, more research are needed.

**Keywords: Leisure, Youth Center, Youth** 

### PP. 649 THE GAME OF HOLLIC AND ITS TYPES INVOLVED IN TRADITIONAL CHILDRENS' GAME CULTURE IN PROVINCE OF MALATYA

 $\underline{\text{Abdullah Doğan}}^1$ , Menderes Kabadayı $^2$ , Mehmet Gül $^3$ 

### **Abstract**

### Aim

In this study, the game of Hollic and its types involved in traditional child's game culture are studied in District of Malatya.

### Method

In the study data collection techniques, face to face interviews and document-scanning techniques have been used. Rules of the game and types by one to one interviews with 60 males have been identified.

### **Findings**

we found out eight types of Hollic games through findings. In these types of games, where at least two

<sup>&</sup>lt;sup>1</sup> Malatya Provincial Directorate of Youth Services

<sup>&</sup>lt;sup>2</sup> Ondokuz Mayıs University Yasar Dogu Faculty of Sport Sciences

<sup>&</sup>lt;sup>3</sup> Cumhuriyet University School of Physical Education and Sports

people are involved in games in open areas, a round stone in the shape of walnut (Hollic) and a hand sized flat stone are used to throw it. Before the game, ordering is specified. A small hoop and a line called throwing line 8 metres across the hoop are drawn. The other players grab the flat stone in their hands and then shoot to stick out Hollic from hoop. The player who sticks out the hollic paces the distance between hoop and hollic. He or she puts the hollic into hoop and then shoots again. If they fail to do, it passes to next player. The first player to reach specified score wins the game.

#### Result

As a result of studying, it has been observed that people improved a game of culture by giving shapes the materials around them according to the rule of the game. While the styles and features in the games are the same, they are different from their names, rules, districts or townships. We established that the above mentioned games used to be played until 1980, but today they are not played anymore.

Keywords: Game, Kids, Traditional Games, Hollik

## PP. 670 A STUDY ON THE FACTORS THAT MOTIVATE KOCAELI UNIVERSITY AND SAKARYA UNIVERSITY PHYSICAL EDUCATION AND SPORT DEPARTMENT STUDENTS TO PARTICIPATE IN RECREATIONAL ACTIVITIES

Dilek Akdag<sup>1</sup>, <u>Hakan Akdeniz</u><sup>1</sup>, Yesim Kormukcu<sup>1</sup>, Sebnem Telci<sup>1</sup>, Ozan Yılmaz<sup>1</sup> Kocaeli University School of Physical Education and Sports

### **Abstract**

**Purpose**: By participating in recreational activities, individuals improve themselves physically, socially and emotionally. Internal motivation, external motivation and unmotivatedness factors play a crucial role in selection and participation of recreational activities. Concordantly the aim of our study is to investigate college students who study at Kocaeli University and Sakarya University Physical Education and Sport Department to determine how they assess their free time, which recreational activities they participate in, and the factors that motivate them to attend these activities, in terms of several variables.

Method: A total number of 200 participants, 64 male 36 female college students studying at Kocaeli University Physical Education and Sport Department and 64 male 36 female college students studying at Sakarya University Physical Education and Sport Department, were voluntarily selected and randomly assigned for the sampling group. "Free Time Motivation Scale" was used as data collection tool. English form of the Free Time Motivation Scale was developed in 1991 by Pellettier et al. and French form was developed in 1996. This data collection tool, which measures the motivation type (Internal Motivation, External Motivation, Unmotivatedness) that influences individuals to participate in recreational activities, consists of a total 28 subjects and 7 sub-dimensions as (1) to know (internal motivation), (2) to achieve (internal motivation), (3) to feel the urge/signal (internal motivation), (4) to determine (external motivation), (5) introjection (external motivation), (6) external order (external motivation), (7) unmotivatedness. The answers were assessed by the 7-point Likert scale, "Strongly Disagree (1)" and "Strongly Agree (7)". The first Turkish version and the validity and reliability check of the scale was made by Mutlu in 2008 with and it was developed by Güngörmüş in 2012. The data were analyzed by SPSS 17.0.

**Results**: When the students of Kocaeli University and Sakarya University were compared, there are significant differences in "external regulator", "unmotivatedness" and "identification" sub-dimensions (p < .05). When we analyze the motivation levels for attending to recreational activities in terms of departments, there are significant differences in "to achieve" and "unmotivatedness" sub-dimensions for Teacher Education department (p < .05), "external regulator", "unmotivatedness" and "identification" sub-dimensions for Recreation department (p < .05), "external regulator", "to know", "being stimulated", "unmotivatedness" and "identification" sub-dimensions for Sport Management department (p < .05), "external regulator" and "unmotivatedness" sub-dimensions for Sport Trainer Education department (p < .05). When we analyze the motivation levels for attending to recreational activities in terms of gender, there are significant differences in "external regulator" and

"unmotivatedness" sub-dimensions for both male and female participants (p < .05).

Conclusion: Along with being well educated in their own departments, college students are ought to be upskilled for using their free time effectively before they get graduated. Furthermore, from the primary school, students should be enabled to actualize themselves by assessing their free time consciously.

**Keywords: Time, Free Time, Recreation, Motivation** 

### PP. 672 A STUDY ON THE CUSTOMER SATISFACTION OF INDIVIDUALS COMING TO FITNESS CENTERS (THE GREEN PARK HOTEL EXAMPLE)

Murat Aktümer <sup>1</sup>, <u>Hakan Akdeniz</u> <sup>1</sup>, Gülsah Sekban <sup>1</sup>, Oguzhan Okumus <sup>2</sup>, Ozan Yılmaz <sup>1</sup>

#### Abstract

**Purpose:** Fitness centers become more attractive day by day. Along with sport activities, these places have begun to provide service to people in terms of health. Since there are people at any age, coming to these facilities regardless of their economic levels, fitness centers must be more attractive and take customer satisfaction into consideration. Concordantly, in this study, the aims were to measure the level of satisfaction of the customers who are members of the Green Park Hotel Fitness Center and to evaluate their level of was conducted in Istanbul Pendik Green Park Hotel. A total 150 participants, 96 male (64%) and 54 female (36%) were randomly assigned for the study. Service Quality Assessment Scale (SQAS) was used as the data collection tool, which was developed by Lam, Zhang and Jensen (2005) and of which validity and reliability check in Turkey was made by Gürbüz, Koçak and Lam (2005). The survey was used to measure the expectation and satisfaction of individuals from fitness centers. There were 40 questions in the scale, including demographical information, and it has 5 subdimensions. 5-point Likert scale, started from "strongly disagree (1)" up to "strongly agree (5)". The survey was analyzed by SPSS 17.0.

**Results:** There is no statistically significant difference in the results in terms of gender, marital status, education level (p > .05). However, female participants are found less satisfied than male participants. Moreover, the study shows that married participants have more expectations than unmarried participants. Lastly, primary school graduate participants are found to have more expectations than high school and college graduate participants.

**Conclusion:** There is no statistically significant difference in 5 sub-dimensions as personnel, program, locker room, physical facility, training facility, in terms of gender (p > .05). However when sub-dimensions are analyzed, female participants have more expectations than male participants in terms of personnel, program and physical facility areas, but female participants are found to have less expectations than male participants in terms of locker room and training facility areas.

**Keywords: Fitness, Customer Satisfaction, Free Time** 

<sup>&</sup>lt;sup>1</sup> Kocaeli University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Bogazici University Faculty of Arts and Science

### PP. 2 ASSESSMENT OF MOTOR DEVELOPMENT DURING EARLY CHILDHOOD PERIOD

### Irmak Hürmeriç Altunsöz<sup>1</sup>

<sup>1</sup> Middle East Technical University Department of Physical Education and Sports

#### Abstract

Objectives: Early childhood period is a critical period for children's motor development. During this period, children should learn fundamental motor skills which are the basis of advanced level of activities and sports. In addition, fundamental motor skills (FMS) are defined as the ABC's of movement (Goodway & Robinson, 2006; Payne & Isaacs, 2011). These skills are not developed as a result of physical growth. Developmentally appropriate instruction and practice should be provided for children to develop these skills. It is argued that children having motor competency are more likely to participate in sports and develop physical activity habits for their future life (Clark & Metcalfe, 2002; Stodden et al., 2008). For this reason, periodic developmental assessments should be performed for motor development of children. A variety of motor development tests are available to assess children's motor development. Professionals should gain necessary knowledge and skills to use the test batteries. Based on that, the purpose of this study was to determine the motor development tests used for children in early childhood period and to compare these tests in terms of usefulness.

Methods: The studies included the motor development tests were investigated by using an electronic search of the following data bases: Academic Search Complete, Education Research Complete, ERIC, Med-Line, Physical Education Index, Psychology and Behavior Sciences Collection and SportDiscus. The keywords used were: fundamental motor skills, motor skill development, motor development, tests, assessment, preschoolers, and their combinations. Six common tests were found in the studies. The tests were listed as follows: Bu testler; Bayley Scales of Infant and Toddler Development-3 (Bayley-III), Beery-Buktenica Developmental Test of Visual-Motor Integration (BEERY), Bruininks-Oseretsky Test of Motor Proficiency-2 (BOT-2), Movement Assessment Battery for Children-2 (Movement ABC-2), Test of Gross Motor Development-2 (TGMD-2) and Peabody Developmental Motor Scale-2 (PDMS-2). These tests were analyzed based on the general characteristics of the tests, age appropriateness, motor development parameters, validity, reliability, strengths and weakness of the tests.

**Results**: General purposes of the tests were a) to assess gross motor skill development, b) to diagnose the developmental delays of children, c) to evaluate motor programs effectiveness, and d) provide developmentally appropriate programs for children. Majority of tests were suitable and age appropriate to assess motor development of children. All tests were previously validated and the reliability scores were provided in many studies. In addition, the findings of the study demonstrated that the tests were generally applied for children with developmental delays or children who were at risk of developing delays. It was also found that typical children were rarely tested by these instruments.

Conclusions: Selecting an appropriate instrument plays an essential role to measure children's motor development (Tieman, Palisano, & Sutlive, 2005). A variety of motor development tests are available for different purposes in this area. It should be noted that six instruments analyzed in this study would be recommended to be used in educational or clinical settings for assessing motor development of young children. However, the main characteristics of the tests should be analyzed by the researchers to select the most appropriate instrument for their research participants (Cools, De Martelaer, Samaey, & Andries, 2009). For this reason, following recommendations were made for the professionals and practitioners to select the best instrument for their research; a) main aim of the tests should be examined, b) information on validity and reliability of tests were gathered from the previous studies, c) test results should be analyzed by the motor development experts for the correct interpretations, d) normative data should be checked for the Turkish population, e) tests manual and guidelines should be read carefully and the researchers should follow the guidelines, f) necessary equipment should be provided for conducting the test and g) tests standardization should be provided for all participants in the studies. In addition, the findings demonstrated that the tests were generally applied for children with developmental delays or children at risk of developing delays. Future studies should also focus on

typical children's motor development.

Keywords: Early Childhood Period, Motor Development, Motor Development Tests

### PP. 25 THE EXAMINATION OF THE STATE-TRAIT ANXIETY LEVELS OF TEAKWONDO PLAYERS IN TERMS OF DIFFERENT VARIABLES

Burçak Keskin<sup>1</sup>, Burcu Güvendi <sup>1</sup>, Aylin Öztürk <sup>2</sup>

### **Abstract**

Anxiety, physical or social environment warn against the dangers of individuals, ensuring compliance necessary for living and contribute in the process.

Aim of this research analysis of taekwando players anxiety level who live in İstanbul according to , age, gender, and national athletes depending on whether the license year state-trait. The research sample as determined by random sampling method consisted of 100 athletes. In this research, survey questionnaires and survey techniques were filled by athletes.

Determined by the investigator of the study data and the preliminary information form State-Trait Anxiety measure the level of Spielberg (1970) developed by the Self-Assessment Inventory was collected using. Tell the reliability and validity of the inventory in Turkey (1977) were made by. The forms used in state anxiety score 1 hour before, three days before or after the competitions to determine the level of trait anxiety was charged twice by athletes.

In the end of the study taekwando general and state anxiety scores were significantly lower compared to other studies in the literature. Female athletes compared to male athletes, athletes with a low degree of license year over year, which, according to the national non-athletes than athletes in the national ones have higher state anxiety scores were determined. If trait anxiety scores in all groups, a significant difference was found between.

Keywords: Anxiety, State, Continous, Taekwondo

### PP. 61 ATTITUDES TO MORAL DECISION-MAKING IN YOUTH SPORT QUESTIONNAIRE 2 (AMDYSQ-2): TURKISH ADAPTATION STUDY

### Bahri Gürpınar<sup>1</sup>

### Abstract

Purpose

The purpose of this study is to test the validity and reliability of the Turkish Version of The Attitudes to Moral Decision Making in Youth Sport Questionnaire-2 (AMDYSQ-2) developed by Lee et. al. (2013) A linguistic equivalence study was performed in translation of the scale. The tested instrument is a 3 factor 15 item scale.

Method

The questionnaire was applied to 286 (109 female 177 male) student athletes from different type of sports. The students were aged between 11-19. The mean age was 15,21. The AMDYSQ-2 is a 5 point Likert type scale, consists of 12 negative (1, 2, 3, 5, 6, 8, 9, 10, 11, 12, 13 and 15. items) 3 positive (4, 7, and 14. items) items.

Results

After linguistic equivalence study was performed, pearson correlation of the both Turkish and English scale was found 0.805 (p=0.000). The test reliability was also found 0.951 (p=0.000). The validity of The AMDYSQ-2 analyzed with exploratory factor analysis. After conducting the

<sup>&</sup>lt;sup>1</sup> İstanbul University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Sports International Fitness

<sup>&</sup>lt;sup>1</sup> Akdeniz University School of Physical Education and Sports

exploratory factor analysis the 3 factor model has been verified as in original scale. The Cronbach's Alpha Coefficient was found 0,836 for Acceptance of Cheating (eg: I would cheat if I thought it would help me win.), 0,720 for Acceptance of Gamesmanship (eg: I sometimes try to wind up the opposition.), 0,523 for Keeping Winning in Proportion (eg: Winning and losing are a part of life) and 0,820 for total. The Kaiser-Meier-Olkin (KMO) test used in order to assess the appropriateness of the sample size for the factor analysis. The Bartlett test was used to determine whether the data were normally distributed.. The KMO value have been found 0,840 and Bartlett test has emerged significant (Chi-square: 1182.347, df: 105, p: 0.000).

Conclusion

The overall results indicate that the The AMDYSQ-2 is a reliable and valid instrument that can be used to assess the Turkish student athlete's moral decision making process.

Keywords: Moral Decision-Making, Validity, Reliability

### PP. 63 INDUSTRIAL FOOTBALL AND ADVOCACY: THE EXAMPLE OF KAYSERI PROVINCE

Ayhan Dever<sup>1</sup>, Ali Erkul <sup>2</sup>

- <sup>1</sup> Ordu University School of Physical Education and Sports
- <sup>2</sup> Cumhuriyet University Faculty of Art

#### **Abstract**

The main purpose of this research themed with the effect of industrialization of football on partisanship is to reveal the views of fans against football which was turned into a huge market by becoming a meta. Nowadays football become a means of consumption, while the profit-seeking organizations, football clubs, football fans have become a customer.

The research is two phased and the first one is composed of key concepts and subjects regarding conceptual framework of the study. Implementation phase, the second section of the study, includes determining the main and sub-hypothesis developed in the light of opinions of fans regarding football and factors revealing the views of fans about industrialized football.

Findings show that %60 of football fans being a member of Kayserispor and Erciyesspor's partizanships / associations feel themselves obliged to spend money continuously or occasionally for their teams while %39 of them does not feel an obligation like this. The reason why the fans feel themselves obliged to do this is the industrialization of football, licensed products of clubs and accordingly, changed perceptions of fans.

Theory approach to the study of cultural industry, cultural industry, and general ideas to play football overlap tried to adapt, in other words, understood that football has become a cultural element offered for sale. In this way, the distinction of being a cultural thing left aside football, and has become a means of consumption.

Consequently, findings acquired from this research show that perception of partizanship has changed with the football's becoming of meta and fans has turned into customers doing shopping for their teams.

Keywords: Football Partisanship, Cultural Industry, Social Identity, Industrialized Football, Group 38, Kapali Kale

### PP. 66 SPORTS BRANCHES AND GENDER EFFECTS ON LEVEL OF SOCIALIZATION

<u>Tülin Atan</u><sup>1</sup>, Veysi Aslan <sup>2</sup>

### **Abstract**

**Purpose:** The purpose of this study was to compare the socialization level of track and field athletes and volleyball athletes. In addition, another purpose was to investigate whether there was an effect of gender and sports age on the level of socialization.

**Method:** 86 track and field athletes whom raced in Junior and Senior Turkey Indoor Athletics Championships which held in İstanbul, and 86 volleyball players whom played in Displacement Volleyball Regional League, participated the study. Sport and Socialization Scale, which have been developed by Aytan (2010), was used. Mann Whitney-U test was used for the statistical analysis.

**Results:** Socialization scores compared between athletics and volleyball players; socialization scores of male track and field athletes were found to be lower than male volleyball players (p<0.05). Female athletes' socialization scores did not differ between the two branches (p>0.05). Without distinction of gender, when the socialization scores of all track and field athletes and scores of all volleyball players were examined, no statistically significant differences were found between the two branches (p>0.05). Socialization scores were compared between two genders. It was observed that female track and field athletes were more social than male track and field athletes (p <0.05). However, the same situation is not the case for volleyball. Socialization scores of female and male volleyball players did not show statistically significant differences (p>0.05). Without distinction of sports branch, when the all females and males socialization scores were compared, it was found that females have higher scores than males (p<0.05). It's thought that, the reason of this difference is due to of the difference scores of male and female track and field athletes.

Socialization scores were compared according to the sports age. The track and field athletes and volleyball players, who engaged in sports for 6-10 years, have higher socialization points than who engaged in sports for 1-5 years (p <0.05).

**Conclusion:** As a conclusion, sports branch, gender and sports age have effects on the level of socializing.

Keywords: Socializing, Track and Field, Volleyball, Gender

### PP. 70 REVIEW OF TRAIT ANXIETY LEVELS AND FORMS OF ANGER EXPRESSION IN TRAP SKEET SHOOTER

Tamer Karademir <sup>1</sup>, <u>Cihan Güneş</u> <sup>1</sup>, Meziyet Taşçı <sup>1</sup>

### **Abstract**

**Objective:** This study was made for the aim to determine how to format of forms of trait anxiety and anger expression of athletes engaged in rifle marksmanship according to some variables

**Method**: For this purpose, in 2012 years, between the ages of 18 and 59, 19 female, 66 male, total of 85 athletes who participated in the Trap-Skeet Turkey championships where held in Kahramanmaras were included in the study group. In the Survey the State-Trait Anxiety Inventory was applied to those who wish to participate as a volunteer in the original form developed by Spielberger et al. (1970) and the Turkish adaptation, reliability and validity studies conducted by Oner and Le Compte (1983). In the determination of forms of anger expression; the trait anger and anger manner scale was used which was developed by Spielberger (1983) and the validity and reliability for our country made by Ozer (1994).

Results: In the study group according to gender variable, it was determined that there wasn't

<sup>&</sup>lt;sup>1</sup> Ondokuz Mayıs University Yaşar Doğu Sport Sciences Faculty

<sup>&</sup>lt;sup>2</sup> Ondokuz Mayıs University Institute of Health Sciences

<sup>&</sup>lt;sup>1</sup> Sütçü İmam University School of Physical Education and Sports

statistically significant difference between trait anxiety levels and anger expression forms (P> 0.05). According to Educational level variable, statistically significant difference was observed between the trait anxiety and anger out mean scores (P <0.05). According to their economic situation, sports year and settlement variables, it was found a statistically significant difference between trait anxiety and anger expressions (P> 0.05). According to consulted on variables in taken decisions within the family, it was determined that the anger control and the anger out score which is the subscale of the trait anger and the anger expression styles created a statistically significant difference in favor of the Group which was consulted in taken decisions (P <0.05). According to friendship relations variable of Survey group, it has been determined that in favor of ones who has very good relations, the levels of trait anxiety is low, the anger control mean score is high and the anger out mean score is low. So, it has been found that it creates a statistically significant difference (P <0.05). Furthermore, it was detected that the research group was always in a correlation with the level of trait anxiety and trait anger, with the anger in and anger out mean scores positively and linearly, with the anger control scores in the negative direction and linearly.

**Conclusion**: Athletes whatever their sport branch, they need to have a certain level of anxiety for performance. It has been concluded that the trait anxiety levels of the study group are within normal limits, the anger control scores which is one of the anger expression forms are higher as compared to other forms of expressions. When considered their sports branch, it was concluded as a good feature.

Keywords: Shooting, Trait Anxiety, Trait Anger, Anger Control

### PP. 101 THE IMPACT OF THE EXERCISE HABITS IN OLD PEOPLE ON THE LEVEL OF TIMIDITY

Deniz Özge Yüceloğlu Keskin<sup>1</sup>, Murat Eliöz <sup>1</sup>, Tülin Atan <sup>1</sup>

### **Abstract**

**OBJECTIVE:** This study has been carried out in order to analyze whether the exercise habits gained or not gained at the early age and the regular exercises at older ages influence the level of timidity.

**METHOD:** The sample of this study consists of male and female volunteers over the age of 60, having no problems in communication, and living in Samsun Metropolitan Municipality Nursing Home and volunteers over the age of 50, having no problems in communication, and living in Giresun Private Nursing Home. 42 old people were interviewed within the scope of this study. Written consent of the institution was obtained before the application of the data collection form. Timidity scale was used in the study (Koç 2006). Timidity Scale consists of 20 items. The highest score in the scale is 100 while the lowest score is 20. High scores are interpreted in the way that the individual perceives himself/herself as a timid person. Mann Whitney-U test was used in the statistical analysis of the study. **FINDINGS:** As a result of the analysis carried out, it has been observed that the timidity scores of the individuals doing exercises at their early age or having regular exercise habits at present are lower than others; however, it has been concluded that this difference is statically insignificant (p>0.05). It has been reported that the presence of a partner, the number of children, the educational level, the duration spent in the nursing house, and smoking do not affect the scores of timidity. It has been found that the timidity levels of the subjects suffering from chronic diseases are different from others (p<0.05). It has been also seen that the scores of the insured subjects are lower than the ones who do not benefit from any social security service (p<0.05).

**CONCLUSION:** In conclusion, it has been observed that physical exercises influence the timidity levels; however, this impact is statically insignificant.

**Keywords: Timidity, Nursing Home, Exercise** 

<sup>&</sup>lt;sup>1</sup> Ondokuz Mayıs University Yaşar Doğu Faculty of Sport Sciences

### PP. 107 THE ROLE AND IMPORTANCE OF MASS MEDIA IN DEVELOPMENT OF FAIR PLAY CONCEPT

Kurtulus Özlü<sup>1</sup>, Şule Kırbaş <sup>2</sup>

- <sup>1</sup> Amasya University Institute of Social Sciences Teaching of Physical Education and Sports
- <sup>2</sup> Amasya University Faculty of Education Department of Physical Education and Sports

### **Abstract**

The aim of this study is to research the positive and negative effects of visual and printed media on the development of Fair Play concept in community. Also it is aimed to offer some ideas to improve this perception through media organs.

Descriptive Analysis was applied through this research.

Sports have an important role in construction and development of popular culture. The struggle in the competitions, feel of passion to win and indefiniteness of the results make the sports attraction centre for people. As the interest to sports in community gets higher, the extent of financial income from sportive activities goes in the right ballpark. Right now, football players are transferred to million Euros, the income from the competitions and advertisements make a good profit for the sports clubs and people get money having bets on the match scores.

In this huge market, it's quiet natural for media corporations to get a high income from sports. While live broadcasting of highly demanded sports competitions offers a cultural activity, on the other hand it also creates a huge bazaar. The live broadcasting or post match programmes of a football competition costs a high deal of money. For example all rights of broadcasting of The Super League by Turkish Football Federation organized in 2010 was adjudicated to 321 million dollars to a private corporation for four years. The pledged amount has reached to 2 billion 135.6 million dollars with the taxes and some increases so far.

In 19<sup>th</sup> century sports news took place on just newspapers and magazines, today they are on both visual and printed media as they are highly demanded by the people. Yet, in order to get a higher interest and so profit, some media corporations produce some aggressive and fake news. Therefore the genuine goals of sports which are peace, brotherhood, and friendship are hindered.

Public and private media corporations should pay more attention to the content of the sports programmes and the news. Their duty is contributing to the social virtues. Having so much effect on society, mass media should be more careful to stop violence and provocation because of sports.

The social virtues such as peace, friendship, brotherhood and the feel of mercy can be provided and transmitted by mass media. Thereupon media corporations should make some structural changes and let the society get use of the programmes in maximum.

Keywords: Fair Play, Mass Media in Development, Media

### PP. 134 PHYSICAL EDUCATION TEACHERS OF THE HUMBLY OF PERSONAL DEVELOPMENT INITIATIVE TAKING SKILLS ON IMPACT

 $\underline{\text{G\"{u}lay Yasemin Aldemir}}^1$  , Ayhan Bayram  $^2$  , Senem Ergan  $^3$ 

- <sup>1</sup> Marmara University School of Physical Education and Sports
- <sup>2</sup> Trakya University Faculty of Economics and Administrative Sciences
- <sup>3</sup> Namık Kemal University Malkara Vocational School

### **Abstract**

### **Purpose**

With this research, the physical education teacher living in Istanbul of the humbly personal development initiative taking skills between humbly take aimed to investigate the relationship.

### Method

In this study, face-to-face access to data as the survey method and sampling random sampling method is one of the simple sampling method was used.

In the first part of the study variables was to determine the demographic characteristics of the participants. Questions to determine demographic variables; sex, marital status, age, tenure and includes items Do you love your job.

In the second part of the study to measure the humility Elliott developed in 2010 by "the humility "scale was used (four sub-dimensions: openness, self-abandonment, humility Focus on Self-Assessment and Others). Scale Sarıçam, Akin, Gediksiz and Akin in 2012 validity and reliability study of the Turkish version was made. There are a total of 13 items on the scale.

In the third part of the study to measure personal development initiatives, Claes, Beeydt and Lemmens developed in 2005 by "personal growth initiative" scale is used. Scale Anlı and Akın in 2011 validity and reliability study of the Turkish version was made. There are a total of 9 items on the scale.

### **Finding**

In the study, living in Istanbul was conducted on 120 physical education teachers. The survey participated female physical education teachers number is 50 and male physical education teachers is 70. According to the analysis, Cronbach Alpha value was found to be 65%. This value is  $0.60 \le \alpha < 0.80$  between the values of the scale is highly reliable due. Physical Education Teachers who participated in the study 85% of the work of their favorite part was determined. As a result of the correlation analysis is computed as the correlation coefficient -0.91. (-0.91 <0.05) are considered hypothesis H0. Humility and personal development of physical education teachers take the initiative there is no significant relationship between skills. The coefficients of the linear relationship between the variables shows that the full negative.

#### Result

In this study, living in Istanbul, physical education teachers humility and personal development initiative taking skills scale by applying the obtained data, the results were evaluated and physical education teacher in humility, personal development, development initiative-taking skills of a significant relationship has not proved. If humility decrease of Physical Education Teachers take the initiative Skills in personal development will increase.

**Keywords: Physical Education Teachers, The Humbly, Personal Development Initiative Taking Skills** 

### PP. 147 BALIKESIR UNIVERSITY OF PHYSICAL EDUCATION AND SPORTS SCHOOL STUDENTS OF DIFFERENT SPORTS ACTIVITY MONITORING BEHAVIOR

<u>İlyas Özen</u><sup>1</sup>, Zekeriya Göktaş <sup>1</sup>

#### Abstract

The purpose of this study was to investigate sport watching behaviours of students at Balıkesir Universty the school of physical and sport, to determine differences in sport watching behaviours in terms of studies.

Data was collected from 386 students using survey questionnaires which were developed based on Capella's (2001) Fan Behavior Questionnaire. Our study involved 386 students (237 male, 149 female) of Balıkesir University the School of Physical Education and Sports. The data collected is statistically analised by using SPSS 20.0 to extract avarage t-test, freguence and percentages to apply test.

As for PB and NB, the p-value = 0.000 < 0.01, the correlation coefficient between these is statistically meaningful. As for PB and NB, the correlation coefficient 0.645 > 0 and this value is close to 1 in terms of absolute value, the relation between these two variables is the same way and strong. Therefore, it can be said that negative behaviour increases when positive behaviour increases.

As for PB and E, the p-value = 0.000 < 0.01, the correlation coefficient between these is statistically meaningful. As for PB and E, the correlation coefficient 0.714 > 0 and this value is close to 1 in terms of absolute value, the relation between these two variables is the same way and strong. Therefore, it

<sup>&</sup>lt;sup>1</sup> Balıkesir University School of Physical Education and Sports

can be said that emotionality increases when positive behaviour increases.

As for NB and E, the p-value = 0.000 < 0.01, the correlation coefficient between these is statistically meaningful. As for NB and E, the correlation coefficient 0.796 > 0 and this value is close to 1 in terms of absolute value, the relation between these two variables is the same way and strong. Therefore, it can be said that emotionality increases when negative behaviour increases.

Independent-samples t-tests revealed that male and female students had a significant difference in terms of sport watching behaviors in all dimensions. The results also showed a significant difference between age and sex students in terms of positive behaviors dimension. The results of the study were discussed in light of earlier findings concerning spectator and watching sporting event behaviors.

Keywords: Sports Activity, Monitoring Behavior, Physical Education and Sport

### PP. 148 PHYSICAL EDUCATION TEACHERS OF THE HUMBLY OF SELF-SABOTAGE ON IMPACT

Gülay Yasemin Aldemir<sup>1</sup>, Esen Kızıldağ Kale<sup>2</sup>, İlhan Adiloğulları<sup>3</sup>

- <sup>1</sup> Marmara University School of Physical Education and Sports
- <sup>2</sup> Eskişehir Sport Club
- <sup>3</sup> Çanakkale Onsekiz Mart University School of Physical Education and Sports

#### **Abstract**

### **Purpose**

This research, the physical education teacher living in Istanbul of the humbly between self-sabotage skills relationship.

### Method

In this study, face-to-face access to data as the survey method and sampling random sampling method is one of the simple sampling method was used.

In the first part of the study variables was to determine the demographic characteristics of the participants. Questions to determine demographic variables; sex, marital status, age, tenure, tenure and do you love your job includes items on the scale.

In the second part of the study to measure the humility Elliott developed in 2010 by "the humility "scale was used (four sub-dimensions: openness, self-abandonment, humility Focus on Self-Assessment and Others). Scale Sarıçam, Akin, Gediksiz and Akin in 2012 validity and reliability study of the Turkish version was made. There are a total of 13items on the scale.

In the third part of the study to measure self-sabotage, Rhodewalt and Jones developed in 1982 by the "self-sabotage" scale is used. Scale Akin, Abacı and Akin in 2010 validity and reliability study of the Turkish version was made. There are total of 25 items on the scale.

In the third part of the study to measure personal development initiatives, Claes, Beeydt and Lemmens developed in 2005 by "personal growth initiative" scale is used. Scale Anlı and Akın in 2011 validity and reliability study of the Turkish version was made. There are a total of 9 items on the scale.

### **Finding**

In the study, living in Istanbul was conducted on 120 physical education teachers. The survey participated female physical education teachers number is 50 and male physical education teachers is 70. Physical Education Teachers who participated in the research work of the great majority of their loved ones have been identified. Physical education teachers take the initiative of humility and self-sabotage are seen to be a significant relationship between.

#### Result

In the study, living in Istanbul, physical education teachers, humility and self-sabotage scale, applying the data obtained in the light of the results evaluated, and physical education teachers in humility and sub-dimensions of self-sabotage of a significant relationship was seen.

Keywords: Physical Education Teachers, The Humbly, Self Sabotage

### PP. 164 EFFECTS OF TEAM COHESION AND INTRA-TEAM COMMUNICATION ON FOOTBALL TEAM'S SUCCESS (MANISA SAMPLE)

 $\underline{\text{Zeynep Ona}}\underline{\textbf{g}}^1$ , Murat Özşaker  $^1$ , Soner Yıldırım  $^1$ , Rıdvan Aydemir  $^1$ 

#### Abstract

**Purpose:** Football regarded as the most popular branch amongst other sports branches. In sport sciences literature, a great deal of studies carried out on football teams. Football teams successes or failures directly or indirectly affect many communities. According to this determining the key factors that contributing football teams success is very essential. When research findings about investigated in this matter, football teams which are ..... will be the ahead of their competitors in league ranking. Esspecially cohesion and communication between team players are evaluated as the factors that affecting teams success. In this case the purpose of this research is to examine the team cohesinon's and intra-team communication's affect on football teams success.

Method: Research sample of the study consists of Manisa U15 league B group (65 licensed football players) and U17 league A group (110 licensed football players) who are voluntarily participated to this research. Survey method was applied for collecting the data of the study. On the purpose of determining the team cohesion of the footballers "group environment scale" was employed. This scale developed by Carron, Widmeyer and Bravley (1985) and adapted in Turkish by Öcel and Aydın (2006). In research in order to measure the communication level of the team sportsmen, "effective communication scale for team sports" that developed by Sullivan and Short (2011) and adapted in Turkish by Onağ (2013) was used. Furthermore with the aim of establishing the footballer's education level, time of licensed sportsmanship, time of playing in the same team, training time and satisfaction level of players personal information form included to the survey. In the data analysis stage of the research, descriptive statistics, correlation analysis, Mann-Whitney U and Logistic Regression tests was employed.

**Findings:** In the research, U15 league fottballer's team success was not effected by team cohesion and intra-team communication, however U17 league footballer's team success seem to be effected by these two dimensions. There is no relationship between U15 league footballers satisfaction levels and team cohesion, intra-team communication levels was determined. But in U17 league footballer's who are playing in teams that have a high cohesion and high intra-team communication level, have a high satisfaction level was seen. Besides, there are relationships between lisenced sportsmanship status, time of playing in the same team and team cohesion of U15 footballers, also relations between training time and team cohesion, intra-team communication levels was detected. Among U17 league footballers, relationship between time of licensed sportsmanhip, time of playing in the same team and training time was found. Besides this relations between training time and social attraction dimension of team cohesion and relations between team cohesion and differentiation dimension of intra-team communication was determined. At the same there is a relation between team cohesion and intra-team communication was seen in this legauge's teams.

**Conclusion:** As the result of this research when U15 and U17 league's footballers team cohesion and intra-team communication levels and their effects on team success analyzed, it was seen that these variables directly and indirectly have effects on footballers.

Keywords: Football, Team Success, Team Cohesion, Intra-Team Communication

<sup>&</sup>lt;sup>1</sup> Celal Bayar University School of Physical Education and Sports

## PP. 166 THE LEVELS OF PHYSICAL SELF-DESCRIPTION OF PRIMARY EDUCATION STUDENTS IN SECONDARY STAGE IN TERMS OF GENDER AND SOCIO-ECONOMIC LEVEL

Barış Baydemir<sup>1</sup>, Hüseyin Özden Yurdakul <sup>2</sup>

### **Abstract**

### THE GOAL

The aim of this study is to show the effects of the gender and socio-economic conditions of primary education students in secondary stage on the levels of physical self-description of themselves.

#### THE METHOD

The main body of this research comprises of sixth grade, seventh grade and eighth grade students in Çanakkale center and counties. Eleven schools were selected randomly among the schools which had low income group and high income group, center and counties and so including 495 girls and 498 boys, totally 933 students were conducted the survey of Marsh Physical Self-description.

In the assessment of data have collected from the research, SPSS 16.0 Statistical Packaged Software was utilized. Primarily, the definer statistics of variables and distributions were calculated. Variance analysis (MANOVA) was made in compliance with gender, socio-economic level and the level of physical self-description of themselves. Versatile variance analysis was regulated as body-mass index (weak, normal, heavy, fat); and t test was used for the meaningfulness of the difference between independent groups. In order to indicate the source of the meaningful difference between groups for each independent variance; Post-hoc Bonferroni test, is one of the multiple matching tests, it was performed in the cases of being homogen of variances; Dunnett's T3 test was performed in the cases of being not homogen of variances. Pearson Mometler, product correlation, was performed, and significance level was regarded as 0,05 in all statistic calculations.

### **FINDINGS**

Girl Top Variances X-S: Weight 46-10 Length 155-9 Body-mass index 18,81-2,94 Wealth33,79-7,53 Coordination 23,05-6,35 Physical Activity 22,06-7,31 Body Design 28,62-7,18 Sport Skill 23,34-7,16 Overall Bodily Effectiveness 27,85-6,48 Outlook 27,11-5,61 Power 24,23-5,94 Flexibility 22,56-7,15 Self-confidence 36,60-6,96 Resistance 19,84-6,7.

Girl Sub Variances X-S: Weight 47-9 Length 157a-9 Body-mass index 18,73-2,88 Wealth34,10 -7,83 Coordination 24,42a-6,08 Physical Activity 22,37-7,32 Body Design 29,41-7,03 Sport Skill 23,89-7,51 Overall Bodily Effectiveness 28,76-6,04 Outlook 27,60-5,58 Power 24,54-5,75 Flexibility 23,71-7,16 Self-confidence 37,37-6,50 Resistance 20,00-6,17.

Boy Top Variances X-S: Weight 51-12 Length 159-12 Body-mass index 20,22-3,71 Wealth 35,59-7,34 Coordination 24,88-6,70 Physical Activity 24,28-6,74 Body Design 27,18-7,44 Sport Skill 27,19-6,81 Overall Bodily Effectiveness 27,41-6,85 Outlook 27,01-6,05 Power27,62-5,95 Flexibility 23,20-6,54 Self-confidence 35,67-7,95 Resistance 23,99-7,39.

Boy Sub Variances X-S: Weight 51-12 Length 159-10 Body-mass index 19,88-3,42 Wealth 37,00a-7,30 Coordination 26,77 a-6,73 Physical Activity 25,92 a-6,98 Body Design 28,27-7,32 Sport Skill 28,70 a-6,44 Overall Bodily Effectiveness 30,25 a-6,35 Outlook 28,84 a-5,76 Power 28,91 a-5,29 Flexibility 24,54 a-6,87 Self-confidence38,06 a-8,01 Resistance 26,07 a-7,20.

a= top socio-economic level, b= found higher than sub socio-economic level in terms of statistic (p<0.05).

### **OUTCOME**

It is detected that at girls, socio-economic level, length (f:5.034, p:0.025), coordination (f:5.880, p:0.016) are found higher than top socio-economic level (p<0,05). Socio-economic level difference is detected in terms of weight, body-mass index, wealth, physical activity, body design, sport skill, overall bodily effectiveness, outlook, power, flexibility, self-confidence, resistance (p>0,05).

It is detected that at boys, sub socio-economic level, wealth (f:4.541, p:0.034), coordination (f:9.626, p:0.002), physical activity (f:6.865, p:0.009), sport skill (f:6.356, p:0.012), overall bodily effectiveness (f:22.738, p:0.000), outlook (f:11.698, p:0.001), power (f:6.462, p:0.011), flexibility (f:4.968, p:0.029),

<sup>&</sup>lt;sup>1</sup> Celal Bayar University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Çanakkale Onsekiz Mart University School of Physical Education and Sports

self-confidence (f:10.817, p:0.001), resistance (f:9.960, p:0.002) are found higher than top socioeconomic level (p<0,05).

**Keywords: Physical Self-Identification** 

### PP. 169 TENDENCY CAUSES AND PROSPECTS TO ATLETIC EVENTS WHOSE ARE IN SECANDARY EDUCATION DEALING WITH ATLETICS SPORTS IN ÇANAKKALE

Gülçin Gözaydın <sup>1</sup>, Emin Cem Sarıel <sup>1</sup>

<sup>1</sup> Çanakkale Onsekiz Mart University School of Physical Education and Sports

### **Abstract**

OBJECTIVE: students who have branches in Çanakkale athletics athletics branch of sport orientation and expectations to determine why. METHOD: The study of the universe, in the branch of athletics at the center of Çanakkale, which constitutes 50 Male 50 girls. Sunay and friends in collecting the data in 1997, has developed the "Turkish Expectations of Athletes Sports and Fitness Point The Elements of" scale is used. The scale consists of three categories of descriptive kullanılmıştır.bulgu have iststis: Athletics Sports directed to the most important causes; Find true happiness in sport athletes (44%), Prospects for athletics sport; National team athletes to be (54%), Athletics Sports Reasons to Start; Yearning for national team athletes begin to impact on the sport (49%) as belirlenmiştir.sonuç: Secondary causes of athletes athletic athletics begin to branch to branch liking and consumer needs to be concluded in the national athletes.

Keywords: Athletics, Reasons Orientation Of Athletics, Athletics Expectations

### PP. 170 COMPARISON OF BEHAVIOURS OF FAIR-PLAY (SPORTSMANSHIP) IN SPORTS

Tahir Kılıç <sup>1</sup>, Mehmet Fatih Eröz <sup>1</sup>, Şura Çalık <sup>1</sup>

### **Abstract**

A descriptive method also intended for screening has been applied in this research which viewing the relationships between understanding of fair-play of athletes who participating in team sports which attend to intercollegiate sports event. And research consisted of two phases. It has been given in a systematic way with screening literature about the current appropriate informations at the first phase of the research. In this way, a theoretical framework about topic has been formed. Questionnaires which developed to achieve the goal has been applied to sample group at the second phase which is implementation phase. MSOS (Multidimensional Sportspersonship Orientations Scale) Scale which has been translated into Turkish and used by Gülfem S. at her PhD thesis has been used when gathering data.

200 subject participated to research as volunteers. The age average of subjects is 21,77±1,964, sports age average of subjects is 9,92±3,043. Athletes who are actively participating in handball, basketball, volleyball and football branches have been included.

According to the in distrubition of "Sports Branch" variable, it has been determined that there is a significant difference (p<0,05) (table 2) in their response to the these statements;

"If I am able to do, I can talk with the referee for my opponent who is going to throw out of the game in unfair way."

"I do not lose my respect even the referee made a bad call."

"I try to fix that if my opponent punished in unfair way."

"Other than the referees I listen to warning of match / field officers."

"If my opponent forgets his or her sports equipment, I give mine's."

**Keywords: Fair-Play** 

<sup>&</sup>lt;sup>1</sup> Akdeniz University School of Physical Education and Sports

# PP. 171 COMPARISON OF LIFE QUALITY OF STUDENTS WHO ARE STUDIYING AT PHYSICAL EDUCATION AND SPORTS TEACHER EDUCATION PROGRAM OF SCHOOL OF PHYSICAL EDUCATION AND SPORTSS, AND TEACHER EDUCATION PROGRAM OF FACULTY OF EDUCATION

Mehmet Fatih Eröz<sup>1</sup>, Tahir Kılıç<sup>1</sup>, Betül Evren<sup>1</sup>

#### Abstract

The purpose of this research paper is to compare the life quality of students who are studying Teacher Education Program of Faculty of Education and Sports Teacher Education Program of School of Physical Education and Sports Teacher Education, Akdeniz University. Students of School of Physical Education and Sports Teacher Education and Faculty of Education constitute the universe of this research. Student's life quality has been evaluated by using Turkish short form (WHOQOL – BREF TR) of WOQOL Life Quality Scale. WOQOL Life Quality Scale was developed by WOQOL group. The short form of this test (WOQOL BREF) was developed by the same group. When looking at the results of Life Quality Scale, it has been found a significant difference in sub-dimensions of general health and physical health. It has not been found any significant difference in the other sub-dimensions. In the results of Life Quality Scale, the students of Education Faculty and other faculties (95,04±10,28) have a higher average than the students of School of Physical Education and Sports Teacher Education (92,54±11,85).

**Keywords: Healthy Life Style, Life Quality** 

# PP. 177 INVESTIGATION OF WHY THE VIOLENCE AND THE UGLY CHEERING TRENDS HAVE IN THE SUPER AMATEUR AND FIRST AMATEUR LEAGUE AUDIENCE IN ÇANAKKALE

Gülçin Gözaydın <sup>1</sup>, <u>Kasım Yalçın</u> <sup>1</sup>

### **Abstract**

OBJECTIVE: Çanakkale province and the super amateur first amateur football league is to examine why the audience cheering the violent and ugly. METHOD: The study of the universe, in the province of Çanakkale consistently superb amateur and amateur football competitions that follow 120 people (15 Female, 105 men) consists of volunteers. Data collection tool, Ozdemir and Coral (2006) developed by the "Causes of Violence in Sport and the Beast and its consequences Cheers" named questionnaire was used. Data were evaluated using descriptive methods have iststis. RESULTS: Attendance, according to the club against one another match-fixing allegations they are located (48%), Referee of the erroneous decisions (51%), violence prevention legal measures for the serious shortcomings that (50%), TV in the voltage amplifier existence of debates (47%) rates are determined. CONCLUSION: Club is observed between against one another match-fixing allegations available in the arbitrators' incorrect decisions, violence prevention legal measures for the serious shortcomings that TV in the voltage amplifier existence of debates intensity increases most important reason.

Keywords: Violence, Audience, Super Amateur and First Amateur League

<sup>&</sup>lt;sup>1</sup> Akdeniz University School of Physical Education and Sports

<sup>&</sup>lt;sup>1</sup> Çanakkale Onsekiz Mart University School of Physical Education and Sports

### PP. 184 THE RELATION OF PRE-COMPETITION ANXIETY LEVELS WITH COMPETITION RESULTS IN RHYTHMIC GYMNASTS

Pınar Tatlıbal<sup>1</sup>, Beyazıt Yemez <sup>2</sup>

### **Abstract**

**Aim:** The anxiety and stress conditions of competitors can effect the competition performance negatively and cause defeats if they are not taken under control. It's thought to be important to know the levels and the reasons of pre-competition anxieties of competitors and trainers especially in such a branch like rhythmic gymnastics, there which is an individual sport, started in early ages. This study was planned to determine the effect of the competitive state anxiety levels of rhythmic gymnasts on competition performance.

**Methods:** 129 competitors of ages 8-15 (mean age  $10.74 \pm 1.68$ ) has attended the study volunteerly who participated in the competitions of Turkish Gymnastics Federation's 2013 programme. The Competition Anxiety Test – Children Form (SCAT-C) was applied to the competitors one day before the competition. Interviews were made with the trainers and were asked to predict the results of the gymnasts. The anxiety levels of the competitors were determined according to SCAT-C results and the effects of competitive state anxiety levels on competition performance were observed according to the prediction of trainers and competition results.

**Results:** SCAT-C average score was found  $17.76 \pm 4.42$  (range = 10-28). Evaluating the attendants" competition results according to trainers' predictions, no significant difference was found in terms of SCAT-C scores (p>=0,05). Also, no significant difference was found in terms of SCAT-C scores, when grouping the competition results as "much lower than predicted, predicted level and higher than predicted" (p>0,05). Again, no significant difference was found when grouping the anxiety levels "low (SCAT-C score: 10-19)" and "high (SCAT-C score: 20-30)" between the competitors who had higher and lower results than predicted (p=0,874). Also no significant difference was found when grouping the competitors as "low anxiety level (SCAT-C score: 10-16), medium anxiety level (SCAT-C score: 17-23) and high anxiety level (SCAT-C score: 24-40)" (p=0,396). All the comparisons mentioned above were made for each and every separate category and no significant relation were found (p>0,05). However, a prominent finding which cannot be statistically significant is that, in juniors category, none of the competitors having high anxiety level reached a better result than predicted.

**Conclusions:** Although there wasn't any supported findings about anxiety level that effect the predicted performance negatively, it is intriguing that, in juniors category, athletes who have high competition anxiety, performed poor performance during the competition unexpectedly. It is thought that more narrowly defined age groups and more participants are needed to determine the effects of pre-competition anxiety level on competition results.

Keywords: Rhythmic Gymnastics, State Anxiety, Competition

### PP. 186 THE RESEARCH OF THE LEARNED HELPLESSNESS IN THE TEAM ATHLETES ACCORDING TO THE GENDER DIFFERENCES

Selin Biçer Baikoğlu<sup>1</sup>, Leyla Saraç <sup>2</sup>

#### Abstract

The aim of this study is, to research the level of the learned helplessness for the team athletes, whether it changes for the gender or not. Having executed their formal education in the Mersin University and the Çukurova University during the 2012-2013 academic year, the students studying in the physical

<sup>&</sup>lt;sup>1</sup> Dokuz Eylül University School of Sport Sciences and Technology

<sup>&</sup>lt;sup>2</sup> Dokuz Eylül University Faculty of Medicine

<sup>&</sup>lt;sup>1</sup> İstanbul University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Mersin University School of Physical Education and Sports

education and sport academy, 269 athletes actively executing sport in the Group B male football team of the Mersin İdman Yurdu, the Female basketball team of the Mersin Metropolitan Municipality (Mersin Büyükşehir Belediyesi), the Female Basketball team of Tarsus Municipality (Tarsus Belediyesi), The Tofaş female basketball team have taken part in this study. The athletes taking part in the research group are composed of 98 female and 183 male persons. The age range of the athletes varies between 18 and 40 years. In study, to set the level of the learned helplessness of these participants; "The Scale of the Learned Helplessnes in the Team Sports" developed by Selin BAIKOGLU-BIÇER is used to the students before the lessons and this scale is used also the athletes before the workout. The test t has having been applied with a purpose to determine whether there are any differences among the learned helplessness points according to the sex of the research group has put down to the fact (t=-2.138; t=0.034), that there is a significant difference among female (t=0.034) athletes.

According to the results, there is a big difference between the points of thelearned helplessnes in female athletes in the team sports and the male athletes. It is observed that the points of the learned helplessness of the female participants are lower than the male participants' points.

**Keywords: Learned Helplessness, Sport** 

### PP. 218 TEACHER EFFICACY OF PHYSICAL EDUCATION AND PRIMARY SCHOOL PRE-SERVICE TEACHERS AT ABANT İZZET BAYSAL UNIVERSITY

Ercan Çiftçi<sup>1</sup>, Burak Gürel<sup>1</sup>, Işıl Aktağ<sup>2</sup>

- <sup>1</sup> Ministry of National Education Physical Education Teacher
- <sup>2</sup> Abant İzzet Baysal University School of Physical Education and Sports

### **Abstract**

Goal:

The purpose of this study was to investigate the teacher efficacy of pre-service teachers from physical education teaching and primary school teaching departments according to their gender, classroom level, and department. Self-efficacy as defined by Bandura is "people's judgments of their capabilities to organize and execute courses of action required to attain designated types of performances". According to his Social Cognitive Theory, self-efficacy beliefs help determine the choices people make, the persistence and perseverance they display in the face of difficulties and the degree of anxiety toward tasks in their life. It has been proposed that individuals based self-efficacy judgments on four main sources of information that vary in appraisal value. These sources:

Mastery experiences

- 2. Vicarious experiences
- 3. Verbal persuasion
- 4.Physiological state

Teacher efficacy defined by Tschannen-Moran and Woolfolk-Hoy " as a teachers judgements of his or her capabilities to bring about desired outcomes of student engagement and learning event among those students who may be difficult or unmotivated."

### Method:

40 female and 80 male students from physical education teaching department and 65 female and 55 male student from primary school teaching department were participated this study. Teacher Sense of Efficacy Scale was used to measure teacher efficacy. This scale was developed by Tschannen-Moran and Woolfolk –Hoy (2001) and translated to Turkish by Aktag (2003). Data was analyzed by using t test and two way Anova.

#### Result:

As a result of this study, it was found that there was no significant difference between male (X=7.02) and female(X=6.95) student teachers in their teaching efficacy. Also there was no significant difference in teacher efficacy level according to departments. (Physical education teaching X=6.91; Primary school teaching X=7.07) When it was looked at the classroom level, it was found that there

was a significant difference between first and third year pre-service teachers, with a third year pre-service teacherd had higher efficacy scores.

Keywords: Teacher Efficacy, Gender, Department, Class Level

### PP. 228 ANALYSE THE STATE AND TRAIT ANXIETY OF ARM WRESTLING ATHLETES IN ADULTS

Gönül Sak  $^1$ , <u>Elif Karagü</u>n $^1$ 

<sup>1</sup> Kocaeli University School of Physical Education and Sports

### Abstract

### **Purpose:**

The purpose of this study is to analyse state and trait anxiety of arm wrestling athletes belong to their gender, age, level of education, level of income, years of playing sports etc.

#### **Procedure**:

This is descriptive study. This study involves 17 women and 74 men volunteer athletes who were in Turkey Arm Wrestling Championship in Kemer/Antalya by 2013. In order to determine to state and trait anxiety levels of the athletes, Spielberger State-Trait Anxiety Inventory (STAI) which was developed by Spielberger and their friends (1964), and Turkish reliability and validity studies by Öner and Le Compte (1983) was used as a data collection tools. The data were analysed by SPSS 20.0 program.

### **Findings:**

When the athletes' state-trait anxiety levels are compared according to their gender; the average state anxiety levels among female athletes are  $44,41\pm7,70$ , where male athletes are  $44,82\pm6,49$ . There is no significant difference statistically; (P=820 P> 0.05). The average trait anxiety levels among female athletes are  $45,64\pm5,29$ , where male athletes are  $44,39\pm6,52$ . Even trait anxiety has no statistical difference according to their gender; (P=0,462 P> 0.05)

When the athletes' state-trait anxiety levels are compared according to their age; the average state anxiety levels among athletes in 18-28 years  $45,11\pm6,6$ , in 29-38 years  $42,76\pm6,11$ , in 39-48 years  $43,75\pm11,84$ , and in 49-58 years are  $44,74\pm4,57$ . There is no significant difference here; (P=0.684 P> 0.05). The average trait anxiety levels among athletes in 18-28 years  $44,70\pm5,91$ , in 29-38 years  $44,15\pm6,25$ , in 39-48 years  $40,50\pm12,79$ , and in 49-58 years are  $49,00\pm4,24$ . There is no meaningful statistical difference here either; (P=0,297 P> 0.05).

When the athletes' state-trait anxiety levels are compared according to their level of education; the average state anxiety levels among athletes in secondary school graduates are  $51,00\pm4,35$ , in high school graduates are  $45,58\pm6,81$ , and in graduate students are  $42,50\pm5,98$ . According to state anxiety, there is a meaningful difference; (P=0,030 P< 0.05). The average trait anxiety levels among athletes in secondary school graduates are  $49,66\pm1,5$ , in high school graduates are  $43,82\pm6,78$ , and in graduate students are  $45,66\pm,26$ . No meaningful statistical difference found here; (P=0,161 P>0.05). In this study, athletes' state anxiety levels show changes according to their level of education. When state anxiety levels are very high by secondary school graduates, graduate students' state anxiety levels are lower. This result shows us that level of education is effective about anxiety levels.

When the athletes' state-trait anxiety levels are compared according to their level of monthly income; the average state anxiety levels among athletes when monthly incomes 501-1000TL are  $46,20\pm4,49$ , when 1001-1500TL are  $42,82\pm8,54$ , when 1501-2000TL are  $46,00\pm5,64$ , when 2001-2500 TL, the points are  $43,05\pm6,85$ , and when 2501 TL and over are  $45,43\pm7,17$ . These state anxiety level points are no meaningful statistical difference; (P= 0,380 P> 0.05). When the athletes' state-trait anxiety levels are compared according to their level of monthly income; the average trait anxiety levels among athletes when monthly incomes 501-1000TL are  $44,30\pm5,83$ , when 1001-1500 TL are  $44,05\pm7,95$ , when 1501-2000TL are  $44,56\pm5,11$ , when 2001-2500TL are  $42,55\pm7,03$ , and when 2501TL and over, the points are  $47,87\pm5,21$  olarak görülmüştür. Even trait anxiety level points are no meaningful statistical difference; (P=0,173 P> 0.05).

When the athletes' state-trait anxiety levels are compared according to their years of playing sports; the average state anxiety levels among athletes for 1-3 years are  $46,64\pm7,49$ , for 4-6 years are  $43,96\pm5,661$ , for 7-9 years are  $46,20\pm7,08$ , for 10-12 years are  $44,18\pm7,27$ , for 13-15 years are  $41,42\pm5,06$ , and for 15 years and over are  $44,00\pm6,88$ . According to state anxiety, there is no meaningful statistical difference; (P=0,447 P> 0.05). The average trait anxiety levels among athletes for 1-3 years are  $44,96\pm6,51$ , for 4-6 years are  $44,69\pm6,50$ , for 7-9 years are  $44,40\pm2,40$ , for 10-12 years are  $43,81\pm4,53$ , for 13-15 years are  $43,00\pm7,83$ , and for 15 years and over are  $45,35\pm7,55$ . According to trait anxiety, there is no meaningful statistical difference again; (P=0,971 P> 0.05).

#### **Result:**

When imagery points of arm wrestling athletes according to their gender, age, level of education, level of income, and years of playing sports are compared, only a meaningful difference is found between the level of education and only in state anxiety. This study can be very useful for the future research because there was no study about Arm Wrestling before this.

Keywords: State Anxiety, Trait Anxiety, Athlete, Arm Wrestling

### PP. 248 TURKISH ADAPTATION OF THE SHORT VERSION OF MORAL DISENGAGEMENT IN SPORT SCALE (MDSS-S): VALIDITY AND RELIABILITY STUDY

### Bahri Gürpınar<sup>1</sup>

### **Abstract**

Purpose

The purpose of this study is to test the validity and reliability of the Turkish Version of The Short Form of Moral Disengagement in Sport Scale (MDSS-S) developed by Boardley & Kavussanu, (2008). Turkish version is traslated with the back-translation method. The scale consists of one factor and 8 items that measure the eight different mechanisms of moral disengagement proposed by Bandura (1991).

Method

The questionnaire was applied to 350 (152 female 198 male) student athletes from different type of sports. The students were aged between 18-36. The mean age was 22,13. The MDSS-S is a 7 point Likert type scale, consists of 8 negative items.

Results

The Cronbach's Alpha Coefficient was found 0,777 for the whole scale. Guttman Split-Half Coefficient obtained by the split half method was found 0,722, Alpha coeefficient for the first 4 items were 0,620 and fort he last 4 items were 0,709. The validity of The MDSS-S analyzed with exploratory factor analysis. After conducting the exploratory factor analysis the 1 factor model has been verified as in original scale. The 8 items of the scale explain %39,69 of the total variance. The Kaiser-Meier-Olkin (KMO) test used in order to assess the appropriateness of the sample size for the factor analysis. The Bartlett test was used to determine whether the data were normally distributed.. The KMO value have been found 0,827 and Bartlett test has emerged significant (Chi-square: 586,561, df: 28, p: 0.000).

Conclusion

The overall results indicate that the The MDSS-S is a reliable and valid instrument that can be used to assess the Turkish student athlete's moral disengagement mechanisms.

Keywords: Moral Disengagement in Sport, Validity, Reliability

Akdeniz University School of Physical Education and Sports

### PP. 254 LEADERSHIP BEHAVIORS IN UNDERGRADUATE TENNIS PLAYERS

T. Osman Mutlu<sup>1</sup>, Halil Evren Şentürk <sup>1</sup>

### **Abstract**

The aim of this study is to examine the leadership behaviors of college students who participated in the national college tennis championship. 140 (82 male, 58 female) undergraduate tennis players have participated in the study. The data sets have been collected from personal information form and the leadership behaviors description questionnaire (LBDQ). The reliability test applied on the purpose of their reliability and the Cronbach alpha value of the scale was .848. Independent samples t-test, one way ANOVA and correlation analysis have used by author. As results of statically analysis, there was no significant difference according to gender, age, and department of them. But it was shown that there was significant difference according to regions of their university and sibling number of them. As a result, sibling number of undergraduate tennis players decreases, structure setup dimensions increases. Therefore, it is sayable that undergraduate tennis players, who have no other brother or sister, have better leadership behaviors than other.

Keywords: Tennis, Player, Undergraduate, Leadership, Behavior

### PP. 258 THE RELATIONSHIPS AMONG APPEARANCE RELATED PERCEPTIONS, PERFECTIONISM AND DISPOSITIONAL FLOW STATE OF EXERCISE PARTICIPANTS

Gaye Erkmen<sup>1</sup>, F. Hülya Aşçı<sup>2</sup>, Sadettin Kirazcı<sup>1</sup>

### **Abstract**

**Objectives** 

The main aim of this study is to investigate whether the dispositional flow state of exercise participants was predicted by appearance related perceptions and self-oriented perfectionism.

Method

The study sample comprises of 216 women (Mage = 26.85, SD = 6.60) and 230 men (Mage = 24.40, SD = 5.93) regular exercise participants (age ranges from 17 to 40). The participants exercising more than six months were selected from different number of exercise types, such as fitness, fitness, badminton, Pilates, Zumba, swimming, walking, yoga, body building, football, running, capoeira, dance, basketball, tennis, taekwondo, cycling, volleyball, rowing and fencing. Participants exercised on average of four times (women M = 3.68, SD = 2.20, men M = 4.56, SD = 2.37) per week.

Exercise participants completed questionnaires including perceived appearance sub-dimension of Physical Self-Description Questionnaire (PSDQ, Marsh et al., 1994), body areas satisfaction sub-dimension of Multidimensional Body-Self Relations Questionnaire (Brown, Cash, & Mikulka, 1990), self-oriented perfectionism dimension of Multidimensional Perfectionism Scale (Hewitt & Flett, 1991), and Dispositional Flow State-2 (Jackson, and Eklund, 2004). The data was analyzed by descriptive statistics, bivariate correlations and hierarchical regression analysis.

Results

According to hierarchical regression analysis, appearance related perceptions and self-oriented perfectionism were significant contributors for prediction of dispositional flow of exercise participants, and perceived appearance and self-oriented perfectionism explained 27% of variance in total dispositional flow. At Step 1 of the regression analysis, perceived appearance and body areas satisfaction explained 21% of the variance in total dispositional flow, F(2, 443) = 59.32, p < .01. On the contrary, at Step 2, self-oriented perfectionism explained 6% of the total dispositional flow F(3, 442) = 53.83, p < .01.

<sup>&</sup>lt;sup>1</sup> Muğla Sıtkı Koçman University School of Physical Education and Sports

<sup>&</sup>lt;sup>1</sup> Middle East Technical University Department of Sport Sciences

<sup>&</sup>lt;sup>2</sup> Marmara University School of Physical Education and Sports

### Conclusions

The findings of the present study indicate that there are significant relationships among appearance related perceptions, self-oriented perfectionism and dispositional flow state of exercise participants. Perceived appearance, body areas satisfaction and self-oriented perfectionism are considered significant contributors for prediction of exercise participants' dispositional flow state.

Keywords: Appearance, Perfectionism, Dispositional Flow State

# PP. 274 THE SOCIOECONOMIC FACTORS AFFECTING SPORTS PREFERENCES OF THE MEMBERS PARTICIPATING IN PHYSICAL EDUCATION AND SPORTS ACTIVITIES IN THE YOUTH CENTERS UNDER THE METROPOLITAN MUNICIPALITY OF ANKARA

Özbay Güven <sup>1</sup>, <u>Lütfiye Demirciçeşmesi</u> <sup>1</sup>

### **Abstract**

**Aim of the Study:** To determine socio-economic factors that affect sports preferences of the members who participate in physical education and sports activities in the Youth Centers under the Metropolitan Municipality of Ankara in the 2012-2013 academic year.

**Material and Method:** In the study, the 36-point survey called 'Socio-Economic Factors Affecting Sports Preferences' was used. The survey was conducted on 171 males and 129 females – 300 members in total- who participated in physical education and sports activities in 9 different Youth Centers under the Metropolitan Municipality of Ankara in the 2012-2013 academic year. Data was analyzed with the SPSS package program. Chi Square test was conducted on it and its coefficient of significance was found to be 0.05.

**Findings**: Given the data regarding the sportive members, it is determined that 57% of the participants are male and 13% are female, 1% of the participants are aged 14, 3.6% is aged 15, 8% is aged 16, 20.6% is aged 17 and 66.6% is aged 18 and above. As for the educational background, 80.3% of the mothers and 86% of the fathers are high school graduates. As for their income status, 65% is middle class. As for their sports preferences, it was determined that 8.3% of the participants preferred badminton, 10% preferred basketball, 6.6% preferred box, 2.3% preferred gymnastics, 11.6% preferred football, 3.6% preferred wrestling, 2% preferred judo, 6.6% preferred karate, 13% preferred table tennis, 7.6% preferred swimming, 15.6% preferred taekwondo, 3.3% preferred volleyball and 9% preferred wushu. **Result:** According to research results, it is determined that sex and age factors as well as the educational background and income status of their parents affect the sports preferences of sportive members.

Keywords: Physical Education, Sports, Sporting Preferences, Socio-Economic Factors

### PP. 279 THE IMPACT OF ENTERTAINING ATHLETICS ON PSYCHOMOTOR DEVELOPMENT OF 12 AGE GROUP CHILDREN

Önder Gök $^1$ , Betül Bayazıt $^1$ , Arda Öztürk  $^1$ 

### **Abstract**

### **Purpose**

The aim of this study is to observe the impact of entertaining athletics on psychomotor development of 12 age group children.

### **Material and Method**

20 girls and boys who are studying Ulugazi secondary school in Kocaeli, İzmit participated in the

<sup>&</sup>lt;sup>1</sup> Gazi University School of Physical Education and Sports

<sup>&</sup>lt;sup>1</sup> Kocaeli University School of Physical Education and Sports

research. The study group was informed about the aim, the content and the process of the study before the study was practised. The study was carried out 8 weeks, two days in a week and 90 minutes. The studies were carried on indoor sports hall of the school. The entertaining athletics parkour was set to develop children's motor skills in the study. There were 6 parts in the parkour and they were basketball slalom, forward roll, 360 degree twist, hopscotch, crossing the bridge, step on the circle. The children's finishing time was timed with the help of stopwatch before and after the study. T test was carried out in order to specify the level of development between pre-test and post-test after the descriptive statistical procedures were made transactions with the obtained data. The significance level was taken as 0.05.

### **Findings**

Athletics at work fun in children aged 12, psychomotor development impact review was conducted to study, research group of fun finishing times for the athletics track pretest posttest p< 0.05 level between the results significant differences were found.

#### Result

Motor development is an on-going process during the child's movement patterns and skills acquisition. The entertaining athletics were designed as a tool in order to discover the child's talent. It provides an environment for the children in order to show their talents and for the practitioner to evaluate the children' talent while the suitable environment is being prepared according to the target high performance level.

While the averages of pre-test is 17,45, the average of post-test is 18,83 at the end of the applied 8 weeks study for improving children's motor development. When you look at the finishing time, there is an increase between pre-test and post-test. At the end of the analysis result, differences between these two averages are found meaningful (p<0,05). The reason can be based on different kinds of materials, the study which is carried systematically, voluntary participation of the children, and suitability of the activities in the study.

**Keywords: Fun Athletics, Psychomotor Development** 

### PP. 285 THE ASSESMENT OF ATHLETES SPORT AGE, SELF-EFFICACY AND SPORT SELF CONFIDENCE IN COMBAT SPORTS

Nevzat Erdoğan<sup>1</sup>, Serdar Kocaekşi <sup>1</sup>, Emre Karaca <sup>1</sup>

### **Abstract**

### **Purpose**

Bandura self-efficiency, "a person doing a particular activity in a particular environment represents belief in herself to be" explained. Bandura, sport environment with high self-efficacy beliefs in the performance of athletes perform will be high and this will lead to performance increases the stated wishes and desires (1977). Vealey (2001) sports self confidence, trait and state sport self-confidence has announced two sub-dimensions. State sport self-confidence is a permanent dimension and trait sport self-confidence is also a variable dimension which affected by time, sports discipline structure, competitors, and some of the social factors.

#### Method

In this study, 12 women and 77 men totaly 89 athletes who participated in Turkey Boxing, Kick-Boxing and Muaytai Championships in 2014 volunteered. "Self-Efficacy Scale" which was developed by Riggs and friends (1977) and adapted to Turkish by Öcel (2002) is used as the data collection tool. The scale consists of 10 questions and 5 likert type scale. The other scale is "Sport Self Confidence Scale" which was developed by Vealey (1986) and adapted to Turkish by Engür and friends (2006). The scale measures 2 main dimension which are trait and state sport self-confidence. Exploratory statistics, Independance Samples T-Test and Pearson Sample Correlation Test are used in the analysis of the data.

### Results

<sup>&</sup>lt;sup>1</sup> Anadolu University Faculty of Sport Sciences

In this study, it is investigated comparation of the athletes' genders according to self-efficacy belief and we evaluate the relation between the athletes' self-efficacy belief and sport self confidence according to sport age. After the analysis, no significant difference is found about self-efficacy beliefs in terms of gender (p< 0.05) and there is only a significant positive coleration between the athletes' sport age and self-efficacy belief (r=0.278; p<0.01).

### **Conclusions**

In our study, it was researched comparation of the athletes' genders according to self-efficacy belief and we evaluated the relation between the athletes' self-efficacy belief and sport self confidence according to sport age. In the study, it was found that while the combat sports athletes' ages were enhancing also their self efficacy beliefs were enhancing. In earlier studies, people with higher self-efficacy beliefs were found to be more successful in sports media (Martin ve Gill, 1991, Kocaekşi, 2006). These results dealing with combat sports athletes, coaches and sports federations to improve sport performance in psychological factors may be important in the study is expected to provide an idea.

Keywords: Combat Sports, Sport Self Confidence, Self-Efficacy

#### PP. 292 INSTITUTIONALIZATION PROCESS OF SOCIOLOGY OF SPORT

### Veli Ozan Çakır<sup>1</sup>

<sup>1</sup> Grand National Assembly of Turkey İstanbul University Faculty of Letters Department of Sociology

### **Abstract**

### Aim

Sociology of sport is accepted as a sub-discipline of sociology and evaluate sports with sociological methods for more than half of a century. However the initial writings of sport sociology have been published at the beginning of  $20^{th}$  century, the emergence of sport sociology generally based on 1950s (Krawcyk, 1990: 41) (Amman, 2000: 90). A rich literature and theoretical approaches could be observed after this era in sport sociology (Luschen and Sage, 1981).

The aim of this study is to examine the institutionalization process of sport sociology and the bodies that occur in this process. In this regard, to determine the development of the sociological research process of sports in different societies and the current institutional status of sport sociology is being aimed.

### Method

According to the content and the aim of our study, the literature of sport sociology has been evaluated since the beginning and a literature search has been made especially for the emergence period of first institutional bodies in sport sociology.

### **Findings**

Sport sociology has a paralel development process with sociology but drew attention with the emergence of regional bodies and societies on the field (Krawcyk, 1990: 43). International Committee for Sociology of Sport which has been established in 1964 yılında under UNESCO and then connected to the International Sociology Association (ISA) (Amman, 2000: 91-92). Regional societies have been created in the following processes as peculiar to sport sociology. These are Japan Society of Sport Sociology (JSSS), North American Society for Sociology of Sport Topluluğu (NASSS), The European Association for Sociology of Sport (EASS) and British Sociology Association Sport Study Group (BSASSG).

### Conclusion

Sport sociology has quickly developed after 1950s. This development is related with the extraordinary central position of modern sports in today's societies. On this occasion the first examples of institutional bodies and studies of sport sociology could be observed in the societies in which the modern sports were initially applied and sourced from.

Keywords: Sport, Sociology, Institutionalization

# PP. 293 COMPARISON OF TURKISH AND JAPANESE MODERNIZATIONS THROUGH SPORT

# Veli Ozan Çakır<sup>1</sup>

<sup>1</sup> Grand National Assembly of Turkey İstanbul University Faculty of Letters Department of Sociology

#### Abstract

#### Aim

The term "modernity" refers to cultural development level of western societies that they have reached with Industrial Revolution in 19<sup>th</sup> century. Moreover the term "modernization" could be defined as the social transformation process of a non modern society on the way to the modern societies (Amman, 1999: 124-125).

Turkey and Japan are two popular examples in social sciences studies which are about modernization. Untill today, Turkish and Japanese modernization processes were compared on the fields of Education, Politics, Army, Civil Bureaucracy and Media (Ward and Rustow, 1964). This study aims to compare Turkish and Japanese modernization processes as between the transition of two societies to modern sports from their traditional sports and the transformation of sportive understandings. Therefore sports as a socially central fact in todays' societies could be used as an instrument to explain the historical social issues.

#### Method

According to the content and the aim of our study, Turkish and English literature on Turkish and Japanese modernizations has been evaluated and a historical sociological literature search has been done especially the modernization methods of two societies on sportive field.

### **Findings**

Modernization processes of two societies could be observed clearly on Turkish and Japanese sports. In this context, transition to modern sports in Turkey and Japan actually refers to beginning of modern life style in the societies and the configuration of past times' physical activities as traditional sports. Transition to modern sports in Turkish and Japanese societies also points out a historical and social breaking point. Thus, the fact "sport" is emerged as an effective instrument to understand and explain this transition. These two societies present certain similarities on their relations with Western World that leaded to their meeting with modernity and modern sports and also leaving or taking to second plan their traditional sports. However the transformation of Japanese and Turkish sports were not in the same period, they overlap within the direct effects of production, social classes and sovereignty relations on sports.

### Conclusion

According to specific sources the Westernization of Turkish sports have begun with the Tanzimat period and started to have social effects on the last quarter of 19th century (Hiçyılmaz, 1983: 8) (Çakır, 2014: 135). During the late Ottoman and early Turkish Republic periods, Western-Modern type of sportive activities started to take part in education system and also the establishment of new clubs support the socialization of modern sports. The modernization of Japanese society since 1850s triggered some radical changes in Japanese culture. As a main result of this changes the transition to modern management of Emperor Meiji from Tokugawa regime effects the social status warrior class. After this era, the term "Bujutsu" which refers the traditional martial arts and techniques in battle came to be considered as the central guide traditional moral and philosophical education and became more commonly known as "Budo". This transition also caused import of new modern sports and transformation of traditional martial arts (Maguire and Nakayama, 2006: 6-7).

Keywords: Turkey, Japan, Modernization, Sport

# PP. 311 EXAMINING THE EXPERIENCE OF SPORT COURAGE AMONG WRESTLERS

Pervin Bilir <sup>1</sup>, Levent Sangün <sup>2</sup>, Mansur Çavuşoğlu<sup>3</sup>

- <sup>1</sup> Çukurova University School of Physical Education and Sports
- <sup>2</sup> Çukurova University Adana Vocational School
- <sup>3</sup> Adana Police Department Board of Inspectors

#### **Abstract**

Aim: This study aimed to examine feelings and behaviors of wrestlers` experiences of courage. Material and Methods: The participants in this study were ninety-seven young wrestlers, aged between 17 and 20, and competing in "International Youth Wrestling Tournament, Republic Cup", held between the 22nd and 27th of October, 2013. Participants were 11.3% female and 88.7% were male, and 13.58% were enrolled in undergraduate Physical Education and Sports Department. The data for this study were collected by using the "Sport Courage Scale", developed by Konter and Ng (2012), and demographic information form. The scale consists of 5 subscales including "determination", "mastery", "assertiveness", "venturesome", and "self-sacrifice behavior". Normally distributed two group mean were compared using one of the parametric tests: t-test, and more than 2 group means compared using one way ANOVA. The Mann Whitney U test was used when two variables were not normally distributed and the Kruskal Wallis test was used comparing three groups. Data were analyzed using SPSS 11.5 software. Findings: According to findings, no significant differences were existed in subscales Sport Courage Scale among the gender, age, education levels, and wrestling style groups; but significant difference existed between the international tournament success level of wrestlers and "determination" subscale scores. Result: According to the results of this study it seems that gender, age, education and wrestling styles do not affect wrestlers' courage experiences whereas the success they achieve in determinisim to be encourages do affect the aforementioned.

**Keywords: Wrestling, Courage, Sports** 

# PP. 321 HOW EFFECTIVE TO DO EXERCISE? EXAMINING THE LEVELS OF SOCIAL PHYSIQUE ANXIETY AND PHYSICAL SELF-PERCEPTION OF UNIVERSITY STUDENTS REGARDING EXERCISE PARTICIPATION

 $\underline{\mathsf{Hakan}\;\mathsf{Kolayis}^1},\,\mathsf{lhsan}\;\mathsf{Sari}^{-1}$ , Nurullah Çelik  $^1$ 

#### **Abstract**

Physiological and physchological impacts of exercise have been a matter of scientific studies and those impacts have been put forward in many ways with the studies done in different sampling groups. Studies to be done in this field is important for determining the various functions of exercise on individuals being in different sampling groups. In this concept, the purpose of this study is to examine if the levels of Social Physique Anxiety and Physical Self-Perception of university students differ regarding the state of doing exercise. For this purpose, totally 626 students (Xage: 21.44±2.19) participated in the study voluntarily. Of all students, while a total number of 330 students comprising the group doing sport regularly, 296 of the population, the second group of the study, comprise the students who do not do sport regularly. The purpose of the study was explained and principle of voluntary participation in the study was stated to the participants. A demographic informations form, Social Physique Anxiety Scale and Physical Self-Perception Inventory were filled in by the participants who accepted to join the study. SPSS 17 packet program was used in the analysis of the datas. Significance level was determined as 0.05 in the study. Kolmogorov-Smirnov Test was used to detect whether the datas show a normal distribution or not. In the analysis of this test, it was found that there was not a normal distribution in the datas. For this reason, being one of the non-parametric tests, Mann Whitney U test was used to compare experiment and control groups. After the analysis, no

<sup>&</sup>lt;sup>1</sup> Sakarya University School of Physical Education and Sports

significant differences were found in "feeling of discomfort about one physique", (U=45343.5, p>0.05), "the expectation of negative evaluation of one's physique by others" (U=47592.5, p>0.05), "social physique anxiety" (U=45846, p>0.05), "body attractiveness" (U=47811.5, p>0.05) and "general physical competence" (U=46949.5, p>0.05) scores between the students who do sports actively and those who do not. However, results indicated significant differences in "sport competence" (U=32075, p<0.05), "physical condition" (U=36242.5, p<0.05) and "strength" (U=38830.5, p<0.05) sub-dimensions in favour of those who participated in exercise. As a result, it is possible to say that exercise participation has no significant effect on Social Physique Anxiety and its sub-dimensions for the sampling group of this research. On the other hand, doing exercise may be said to make a difference on sportive efficieny, physical condition and strength in a positive way.

Keywords: Physical Self-Perception, Social Physical Anxiety, Exercise

# PP. 324 COMPARISON OF RUSSIAN AND TURKISH YOUNG SOCCER PLAYERS' SPORT MOTIVATION SCALE-6 (SMS-6) SCORES

Aleksandr, N. Veraksa <sup>1</sup>, <u>Fatma İlker Kerkez</u><sup>2</sup>, Sergey, V. Leonov <sup>1</sup>, Gülşen Mertyüz <sup>2</sup>

#### Abstract

Study aim: The identification of motivational factors for participation in sports at young ages is a topic of great relevance. The motives of young people to participate in sports are a combination of multiple social, environmental, and individual attributes that determine the choice for a specific modality, persistence in sports, and engagement in more intense training to achieve high performance. In this respect, studies investigating the motivational factors for sport participation are important since they permit identification of the reasons that lead young people to begin participating in sport activities and the factors responsible for their maintenance. The objective of this study was to determine and compare of Sport Motivation Scale-6 (SMS-6) Scores between Russian and Turkish young soccer players.

Material and methods: A total 353 athletes (Russian, n=142 (male); mean age=17,09  $\pm$  3,83 years and Turkish, n=211 (male=117, female=94); mean age= 11,796  $\pm$  1,85 years) from different soccer teams were included in this study. Sport Motivation Scale-6 (SMS-6) was used to identify athlete's motivation toward sport participation.

Results: Turkish young soccer players' amotivation, external regulation and identified regulation scales' scores significantly higher than Russian players (p<0,05). Correlation analysis's results for Russian and Turkish football players (SMS) (boys) showed that there was positive correlation between soccer playing time and integrated regulation scale. But there were negative correlations between soccer playing time and amotivation, external regulation, identified regulation scales. Also there were negative correlations were obtained between age and amotivation, external regulation, identified regulation scales.

Conclusions: Age difference is considered to be responsible for these differences in scores.

Keywords: Sport Motivation Scale -6, Soccer Players, Russian, Turkish

<sup>&</sup>lt;sup>1</sup> Lomonosov Moscow State University Moscow Department of Physical Education

<sup>&</sup>lt;sup>2</sup> Muğla Sıtkı Koçman University School of Physical Education and Sports

# PP. 325 USING SPORT IMAGERY IN RUSSIAN AND TURKISH YOUNG SOCCER PLAYERS

 $\underline{\text{Fatma İlker Kerkez}}^2$ , Aleksandr, N. Veraksa  $^1$ , Alena, I. Grushko  $^1$ , Gülşen Mertyüz  $^2$ 

#### **Abstract**

Study Aim: Athletes of all ages report using imagery extensively to enhance their sport performance. It is a well known fundamental skill that has a critical role in how a player performs and shows his/her competency during a real world game. On the other hand soccer as a complex team sport includes several skills linked to physical and psychological. The primary purpose of the present study was to determine using sport imagery in Russian and Turkish young soccer players via the Sport Imagery Questionnaire—Children's Version (SIQ-C).

*Design:* Participants were 353 athletes (Russian, n=142 (male); mean age=17,09  $\pm$  3,83 years and Turkish, n=211 (male=117, female=94); mean age= 11,796  $\pm$  1,85 years) from different soccer teams. *Methods:* Athletes were administered the SIQ-C.

Results: The results indicated that Turkish young soccer players use imagery more frequent than Russian soccer players (p<0.05). Also we found that there is a significant negative correlation between age and frequency of imagery usage (p<0,05), no correlations were found between frequence of imagery usage and soccer playing time.

Conclusions: These findings suggest that comparing Turkish and Russian samples, we can say that Russian athletes use all imagery types significantly less frequently than their Turkish counterparts. As for the analysis of gender, although there was found the difference in the use of CS imagery between Turkish girls and boys (in favor of male players) (but there is no preference in other imagery types usage), we was not be able to compare Turkish and Russian samples by that parameter (still because the soccer part of Russian sample included only male players).

Keywords: Sport Imagery, Young Soccer Players, Russian, Turkish

# PP. 326 SPORT SPECTATORSHIP MOTIVES OF PHYSICAL EDUCATION AND SPORTS SCHOOL THE BALIKESIR UNIVERSITY STUDENTS

 $\underline{\text{Ilyas \"Ozen}}^1$ , Erdil Durukan  $^1$ , Orçun Can Yücel  $^1$ 

## Abstract

The purpose of this study was to investigate Balıkesir Universty the school of physical and sport students' sport spectatorship motives and to determine differences in motives in terms of gender. First, correlations for positive behaviour, negative behaviour and emotionality were calculated. Before calculating these correlations, Kolmogorov-Smirnov test was applied as a pre-test for normality assumption. Although normality assumption was confirmed for the emotionality variable, it wasn't confirmed for positive and negative behaviour variables, therefore a non-parametric method, Spearman Rank Correlation Coefficient was used for correlation (relation) analysis. (PB= Positive Behavior, EB= Negative Behavior, E= Emotionality)

As for PB and NB, the p-value = 0,000 < 0,01, the correlation coefficient between these is statistically meaningful. As for PB and NB, the correlation coefficient 0,645 > 0 and this value is close to 1 in terms of absolute value, the relation between these two variables is the same way and strong. Therefore, it can be said that negative behaviour increases when positive behaviour increases.

As for PB and E, the p-value = 0.000 < 0.01, the correlation coefficient between these is statistically meaningful. As for PB and E, the correlation coefficient 0.714 > 0 and this value is close to 1 in terms of absolute value, the relation between these two variables is the same way and strong. Therefore, it

<sup>&</sup>lt;sup>1</sup> Lomonosov Moscow State University Moscow Department of Physical Education

<sup>&</sup>lt;sup>2</sup> Muğla Sıtkı Koçman University School of Physical Education and Sports

<sup>&</sup>lt;sup>1</sup> Balıkesir University School of Physical Education and Sports

can be said that emotionality increases when positive behaviour increases. As for NB and E, the p-value = 0.000 < 0.01, the correlation coefficient between these is statistically meaningful. As for NB and E, the correlation coefficient 0.796 > 0 and this value is close to 1 in terms of absolute value, the relation between these two variables is the same way and strong. Therefore, it can be said that emotionality increases when negative behaviour increases.

**Keywords: Physical Education, Sport, Sports Advocacy** 

### PP. 329 SURVEY ON INTEREST OF HIGH SCHOOL STUDENTS OF AMASYA IN SPORTS

Dursun Güler <sup>1</sup>, <u>Burak Özdemir</u><sup>2</sup>, Bahadır Şilli <sup>3</sup>, Aykut Arslan <sup>3</sup>, İsmail Taşkaya <sup>3</sup>

- <sup>1</sup> Amasya University Faculty of Education Department of Physical Education and Sports
- <sup>2</sup> Amasya University Master Student Institute of Social Sciences
- <sup>3</sup> Amasya University Student Faculty of Education Department of Physical Education and Sports

### **Abstract**

### **Purpose**

Investigating and evaluating interest of high-school students of Amasya in sports.

#### Method

The survey was done on 532 volunteer 9th, 10th and 11th degree students. Interest verse form was used in order to get the data.

Analyzing the data, frequency distribution of students' interests and inclinations is used and evaluated.

### **Findings**

It was found out that 28,9% of the participants were doing some kind of sports and the remaining 71,1% are not doing any. The sports students want to do are football, volleyball, swimming and basketball; 24,1%, 15,8%, 13,7% and 13,3% relevantly.

#### Result

It can be said that, in heavy studying atmosphere, students who are doing sports and those who want to take to a sport can not find chance and enough time; and the participants who have chance and time are interested in kind of sports that are not reachable in their neighbourhood.

**Keywords: School Age Children, Interest of Sport** 

# PP. 334 INVESTIGATION OF EMOTIONAL INTELLIGENCE LEVELS OF CHILDREN PLAYING FOOTBALL IN TERMS OF DIFFERENT VARIABLES

 $\underline{\mathsf{Ayşe}}\;\mathsf{Feray}\;\mathsf{\ddot{O}zbal}^{\,1},\;\mathsf{Serdar}\;\mathsf{Kocaekşi}^{\,1},\;\mathsf{Burakcan}\;\mathsf{Kaplan}^{\,1}$ 

#### Abstract

# **Purpose**

Emotional intelligence is an essential element for socialization and becoming successful of the individual. It can be told that people who have high levels of emotional intelligence are able to orient themselves in all areas and able to communicate positively. Especially in recent years the significant impact of multiple intelligence theory on people came to the fore. Correspondingly researches are intensified in emotional intelligence field as in many intelligence fields. The purpose of this study is to analyze the emotional intelligence levels of children who play football in different sport clubs in İstanbul in terms of different variables (gender, where the family lives, education and income).

#### Method

101 students who play football in different sport clubs in İstanbul volunteered in this study. "Emotional Intelligence Scale" which is developed by Bar-On (1997) and adapted to Turkish by Acar

<sup>&</sup>lt;sup>1</sup> Anadolu University Faculty of Sport Sciences

(2001) is used as the data collection tool. Emotional Intelligence Scale consists of 5 sub-dimensions and total 88 items. The scale is proportionalized from "1" to "5" as "I strongly disagree", "I disagree", "Neutral", "I agree", "I fully agree". Exploratory statistics and MANOVA are used in the analysis of the data.

## **Findings**

In this research the emotional intelligence levels of student are evaluated in terms of gender, where the family lives, education, income. After the analysis no significant difference is found in terms of gender (p< 0.05), where the family lives (p< 0.05) and income (p< 0.05). Only significant difference is found in interpersonal relationships sub-dimension of "education" (p>0.05).

#### Conclusion

In this research it is investigated if the emotional intelligence levels of the students who play football in different clubs in İstanbul differ in terms of gender, where they live, education and income. And only significant difference is found in the interpersonal relationships sub-dimension of "education", and no significant difference is found in other sub-dimensions. It can be told that the students who have high levels of emotional intelligence are able to succeed in many areas and if they fail they can handle the situation. Consequently the family and teachers take on a major task during the Emotional Intelligence development process of students.

Keywords: Emotional Intelligence, Football, Athletic Clubs

# PP. 343 THE INVESTIGATION OF BODILY/KINESTHETIC INTELLIGENCE AND SPORTSPERSONSHIP ORIENTATION OF STUDENTS IN SCHOOL OF PHYSICAL EDUCATION AND SPORTS

Ender Şenel<sup>1</sup>, Mevlüt Yıldız <sup>1</sup>

### Abstract

The aim of this study was to examine bodily/kinesthetic intelligence and sportspersonship orientation of students in School of Physical Education and Sports. 375 university students in School of Physical Education and Sports at Mugla Sitki Koçman University voluntarily participated in the study. Bodily/kinesthetic sub-dimension of Multiple Intelligence Inventory, developed by Özden (2003) was used in the study. Profile list by Saban (2001) was used to assess the inventory. Multidimensional Sportspersonship Orientation Scale (MSOS), developed by Vallerand et al. (1997) and adapted to Turkish by Balçıkanlı-Sezen (2010), was used to determine sportspersonship orientation of participant. 57.1% of the participants was male (n=214), 42.9% of them was female (n=161). Departments of physical education and sports teacher, coach education, sport management and recreation participated in the study. Collected data was analyzed in SPSS by using, frequency, independent t test, one-way ANOVA. 34.9% of participant reported that they do individual sports (athleticism [n=27], swimming [n=17], badminton [n=14], body building [n=7], gymnastic [n=5], wrestling [n=10], tennis [n=31], taekwondo [n=6], muay-thai [n=4], rowing [n=1], judo [n=1], cycling [n=1], boxing [n=1], dance [n=4], arching [n=1]); 56.3% of them reported that they do team sports (football [n=118], volleyball [n=42], basketball [n=26], handball [n=18], hockey [n=1], folk dances [n=6], korfball [n=1]). %33 of the participant reported that they had no branches. In the study, significant difference was found between female and male students in terms of Respect for rules and officials (p<0.05). No significant differences were found between genders in terms of other variables. Significant difference was found between second and forth grade in terms of respect for rules and officials. No significant difference was found between departments. Significant differences were found between students doing individual sports and those doing team sports in terms of respect for social conventions and respect for rules and officials (p<0.05). Significant differences were found between students doing team sports and those having no branches in terms of respect for rules and officials and respect for one's full commitment toward sport participation (p<0.05). Significant differences were found between students doing individual sports and those having no branches in terms of

<sup>&</sup>lt;sup>1</sup> Muğla Sıtkı Koçman University School of Physical Education and Sports

bodily/kinesthetic, respect for social conventions, respect for rules and officials, respect for one's full commitment toward sport participation, respect and concern for the opponent (p<0.05). Positive correlations were found between bodily/kinesthetic intelligence and respect for rules officials, respect for one's full commitment toward sport participation, respect and concern for the opponent. Consequently, it can be said that university students having higher level of bodily/kinesthetic intelligence are more prone to sportsmanship behaviors.

Keywords: Bodily/kinesthetic Intelligence, Physical Education, Sport, Sportspersonship

# PP. 349 RESEARCH FOR CORRELATION BETWEEN YELLOW CARD, COMPETITION'S RESULT AND GOALS ALLOWED IN DURING SOCCER COMPETITIONS

# Halil Orbay Çobanoğlu<sup>1</sup>

<sup>1</sup> Anadolu University Faculty of Sport Sciences

#### **Abstract**

**Purpose:** Nowadays it has been mentioned that many factors affecting sports performance. One of the factors are psychological factors. One concerns the psychological factors that affect performance of sports is an anciety. Anxiety found many definitions in the literature is about the future of people sad and with a sense of insecurity in a wait state, bothering a mixed state of excitement. In the literature there has been two variety of anciety. The first one is a state anciety, the second one is a regular anciety. State anciety is defined as depending on the environmental conditions often resulting from a stress, depending on the logical reasons, others also reason that is understandable, generally depending on the situation of every person to live in temporary. State anciety is a significant prior to, during and after the competition for the sportsmen. Anxiety level adversely affect performance and the outcome of the competition. The aim of this study is to research correlation between yellow card, goals allowed and soccer competition's result.

**Method:** The research has been performed as a general scanning model. General scanning models is the scan edits consisting of a large number of elements in the universe, done the universe has an overall judgment about all of the universe or to a group to be taken from the example or sample. The research sample consisted of the 306 competitions in Turkey Super League in the season 2013-2014. The data has been obtained by permission taken Turkey Football Federation Official Web Site. In 306 competition teams have totaly received 565 yellow cards and have totaly allowed to 429 goals in their own goals. SPSS 18.0 for Windows statistical analysis program was used for statistical analysis of the data. In this analysis spearman correlation tests was technically used from nonparametric statistical test for correlation and the relationship between the variables were tested with a level of significance of p < 0.05.

**Result:** As a result of research a statistically significant (p = 0.02) correlation with negative directional low levels (-0.09) was found among yellow cards and competition's result and a statistically significant (p=0.00) correlation with positive directional low levels (0.13) was found among yellow cards and goals allowed. So while yellow card increased, goals allowed increased and while yellow card increased, won decreased.

**Conclusion:** For success in soccer must be implement a good offensive and defensive principles. If there isn't one of them, this will be the negative impact on the success of the teams. It has been explained that correlation yellow card between goals allowed and competition's result; because of anxiety of let alone his team, soccer player could not fulfill the pressure having been defence principles. If there were a player to fill in a player received yellow card, changing him without wasting time would make a positive impact on the success of the team.

Keywords: Yellow Card, State Anxiety, Correlation

# PP. 355 PHYSICAL EDUCATION AND SPORTS IN HIGH SCHOOL STUDENTS SUBMISSIVE RELATIONSHIP BETWEEN BEHAVIOR AND SELF ESTEEM

Fikret Alıncak<sup>1</sup>, Hüseyin Öztürk<sup>2</sup>, Nait Özdayı<sup>3</sup>

### Abstract

**Background**: The aim of this study is to determine relationship between submissive acts and self esteem among physical education and sport high school (PESHS), physical education and sport teacher (PEST) students.

**Methods**: This descriptive research has been performed with 123 PESHS, PEST students in Gaziantep University, between February 2013-March 2014. Research data has derived by the questionnaire from that composed of two-parts. In the first part The Submissive Act Scale (SAS) and in the second part The Coopersmith Esteem Inventory (CSEI) has been used. The data analyzed by spearman's correlation analysis.

**Results**: According to collected data; the students, who has participated to research 34.88 +-8.7 SAS average and 74.78 +/- 16.2 CSEI average has been established. 47 % of the students have SAS points more than average and 65 % of the students have high self esteem level is confirmed. As a result correlation analysis, significant relationship has determined between submissive acts and self esteem (r=- 0.42, p<0.01). According to the findings; submissive acts were negatively correlated with self esteem. **Conclusion**: Communications and interpersonal relationships are very important for PEST. PEST play a vital communication role in the education system. Assertiveness and self esteem is necessary for effective PEST communication. Because of the process of becoming a nurse is started at nursing school, nursing education should be more promote to self esteem and decreased to submissive behaviours through educational methods.

Keywords: Submissive Act, Self Esteem, Physical Education and Sport Teacher, Student

# PP. 356 INVESTIGATION THE EFFECTS OF EIGHT WEEKS PILATES AND STEP-AEROBICS ON STURCTURAL, BIOMOTORICAL AND PHYSIOCOLOGICAL VARIABLES OF SEDANTERY WOMEN

<u>Fatma Öztürk</u><sup>1</sup>, Özhan Bavlı <sup>1</sup>

# Abstract

Purpose: The aim of this study was to investigate the effects of eight weeks step- aerobics and pilates trainings on sturctural, biomotorical and psychological variables on sedantary women.

Method: Totally 20 women (39,5±3,7 years avarege age, no health problem and did not perform step aerobics and pilates before) participated in to the study voluntary. Participants divided in to two experiment groups (step aerobics n:10 pilates n:10) randomly. Groups did exercises twice a week with 60 minutes duration. Body height and body weight, flexibility, balance, leg and abdominal strength, self-esteem scale (Marsh 1994) performed before and the after the eight weeks trainings. SPSS used for analysis.

Findings; statistical differences found on flexibility (pretest;  $5.9\pm4.9$  cm post test;  $7.5\pm6.1$ cm), balance (pretest;  $6.9\pm4.6$  faul post test;  $5.2\pm4.3$  faul), leg strength (pretest;  $100.0\pm22.4$  cm post test;  $104.3\pm22.1$  cm), abdominal strength (pretest;  $42.5\pm14.3$  repeat, post test;  $53.0\pm16.1$  repeat) Body Mass Index (pretest;  $25.8\pm3.4$  kg/m<sup>2</sup> post test;  $24.8\pm3.2$  kg/m<sup>2</sup>), health (pretest;  $31.7\pm5.5$  post test;  $31.6\pm5.3$ ), general physical condition (pretest;  $21.9\pm4.5$  post test;  $24.0\pm3.8$ ), appearance (pretest;  $25.7\pm3.9$  post test;  $27.0\pm4.1$ ), strength (pretest;  $25.7\pm3.9$  post test;  $27.0\pm4.1$ ) and self

<sup>&</sup>lt;sup>1</sup> Gaziantep University Nizip Vocational Schools

<sup>&</sup>lt;sup>2</sup> Gaziantep University School of Physical Education and Sports

<sup>&</sup>lt;sup>3</sup> Balıkesir University School of Physical Education and Sports

<sup>&</sup>lt;sup>1</sup> Çanakkale Onsekiz Mart University School of Physical Education and Sports

confidence (pretest;  $36,7\pm7,8$  post test;  $38,2\pm7,3$ ), according to comparing the pretests – posttest measurements of pilates group (p<0,05). On the other hand statistical differences found on flexibility (pretest;  $6,1\pm5,4$ cm post test;  $8,4\pm5,9$  cm), balance (pretest;  $6,4\pm3,7$  faul post test;  $4,9\pm3,5$  faul), leg strength (pretest;  $101,5\pm29,5$  cm post test;  $105,9\pm28,6$  cm), abdominal strength (pretest;  $48,2\pm12,8$  repeat post test;  $56,7\pm11,6$  repeat), Body Mass Index (pretest;  $29,2\pm6,1$  post test;  $28,0\pm5,7$ ) health (pretest;  $21,2\pm1,3$  post test;  $23,7\pm3,2$ ) strength according to comparing the pretests – posttest measurements of step aerobic group (p<0,05). Mann Whitney U analysis performed to compare differences between two groups of pretest- posttest measurements and analysis showed that there is no statistical differences between groups. (p>0,05).

As a conclusion it is possible to say that eight weeks step aerobics and pilates trainings has possitive and similar effects on structural, biomotorical and psychological variables of sedantary women.

Keywords: Sport, Exercise, Step Aerobics, Pilates, Sedantary

# PP. 369 AN INVESTIGATION ON JOB SATISFACTION LEVELS OF ELITE FEMALE VOLLEYBALL PLAYERS

<u>Ümit Doğan Üstün</u><sup>1</sup>, Osman Gümüşgül <sup>1</sup>, Haluk Korkmaz <sup>1</sup>, Emre Sevinç <sup>1</sup>

#### **Abstract**

### Aim

The aim of this study was to investigate job satisfaction levels of female volleyball players who plays in first division in the extent of their professional experience and age.

#### **Material and Method**

In this study Turkish version of Minnesota Job Satisfaction Questionnaire was used as data gathering tool. The questionnaire consisted of 20 items and 3 factors such as intrinsic satisfaction, extrinsic satisfaction and general satisfaction.

## **Study Sample**

After legal permissions (Turkish Volleyball Federation document number 1787) 108 elite female volleyball players, who played in first league in the 2013-2014 season, volunteered for this study.

#### **Data Analysis**

In the data evaluation section first of all reliability of the questionnaire for the sampling group was examined. One sample kolmogorov-smirnov test was applied for seeking if the data shows normal distribution and also skewness and kurtois values were examined. Than two way manova parametric test was applied for seeking the significant differences between job satisfaction levels of volleyball players (p=0.05).

### **Findings**

General satisfaction level of volleyball players was found to be high and extrinsic satisfaction level was found to be higher than intrinsic satisfaction level. Also according to two way manova results there were no significant differences between job satisfaction levels of volleyball players according to their professional experience and age (p>0.05).

#### **Results**

As a result this study shows that female volleyball players have high general job satisfaction level. This result may be because they are professional players and they have good careers.

Keywords: Volleyball, Job Satisfaction, Professional Experience, Age

<sup>&</sup>lt;sup>1</sup> Dumlupınar University School of Physical Education and Sports

# PP. 372 INVESTIGATING SUPERSTITION BEHAVIOURS OF SCHOOL OF PHYSICAL EDUCATION AND SPORTSS STUDENTS ACCORDING TO THEIR ATTENDING LEVELS TO INDIVIDUAL AND TEAM SPORTS

Mehmet Demirel<sup>1</sup>, Utku Işık <sup>1</sup>, Hilal Seval <sup>1</sup>, Seda Okat <sup>1</sup>

#### **Abstract**

### **Purpose**

The aim of this study was to investigate superstition behaviours of School of Physical Education and Sports students according to their attending levels to individual and team sports.

#### Method

In this study as a part of survey method, questionnaire technique was applied for data collection. In this study as a data gathering tool Buhrmann and Zaugg (1981)'s, originally named Superstitious Ritual Questionnaire", was used. The Turkish adaptation study of the scale was done by Barut (2008). The scale is 5 Likert type and consisted of 37 items and 6 sub dimensions.

#### **Study Group**

The sampling group of this study consisted of 124 female, 219 male totally 343 students who study at, physical education and sport teaching, coaching education, sport management and recreation departments of Dumlupinar University School of Physical Education and Sports.

## **Analysis of Data**

In the evaluation of data first one sample Kolmogorov-Smirnov was applied for seeking normal distribution and it was determined data was not showing normal distribution, than in addition to descriptive statistics such as percentage (%) and frequency (f) Mann Whitney U and Kruskall Walliss statistical tests were applied.

#### Findings

According to Mann Whitney U test results, related with superstition level of participants' according to gender, superstition level of participants did not show any significant differences according to their gender. When superstitions level of the participants, according to their attending levels to individual and team sports, examined there were no significant differences too; but when participants superstitions level, according to their welfare, examined there were significant differences in the clothing and appearance, team behaviour and prey sub dimensions.

#### Results

As a result gender and attending to individual or team sports are not factors that make a significant difference in the superstition behaviour but welfare was found to be a factor that affects superstition behaviour.

Keywords: School of Physical Education and Sports Students, Individual and Team Sports, Superstition

# PP. 376 EMPHATIC TENDENCIES OF SPORTS SCIENCES FACULTY STUDENTS OF ANADOLU UNIVERSITY

<u>Dilek Yalız Solmaz</u><sup>1</sup>, Gülsün Aydın <sup>1</sup>

#### **Abstract**

#### **Purpose**

Understanding each other correctly of the people and societies which based on communication, depends on a social interaction that is only established between individuals. People need to have a lot of specialities to maintain this interaction. One of the factors faciliating social interactions can be thought as "emphaty". Emphaty is a prequisite for giving the right meaning to life and making healthy communications and interactions with people. The purpose of this study is to research the emphatic

<sup>&</sup>lt;sup>1</sup> Dumlupınar University School of Physical Education and Sports

<sup>&</sup>lt;sup>1</sup> Anadolu University Faculty of Sport Sciences

tendencies of Anadolu University Sports Sciences Faculty students in terms of gender, department and grade.

### Method

The research group consists of 197 students those study at Sports Sciences Faculty at Anadolu University at 2013-2014 spring semester. Empathy Quotient (EQ) which is developed by Baron-Cohen and Wheelwright (2004) and adapted to Turkish by Bora and Baysan is used as the data collection tool in this study. EQ is a self-rated instrument that includes 40 questions tapping empathy and 20 filler items. The answerer makes a pick between 4 choices those scale between "I strongly agree" and "I strongly disagree". Only 40 items which measure "emphaty" is taken into account while scoring. The least emphatic answer is given 0 point, the most emphatic answer is given 2 points, and the second emphatic answer is given 1 point. In analyzing the data from the computer, in looking to achieve the objectives of the study the standart deviation and the means of empatic tendency scores of students were calculated; and in order to determine if the emphatic tendency scores differ in terms of gender, department, grades "T test" is used. ANOVA is used if more than two groups are compared by. The significance level is accepted as .05 during the statistical analysis.

### **Findings**

No statistically significant difference is found between male and female students' emphatic tendency levels [t(195)=-.78, p>.05]. A significant difference is found between the emphatic tendency scores and students' departments [f=5.86, p<.05]. And no significant difference is found between student grades and emphatic tendency levels [f=1.42, p>.05].

#### Conclusion

After the research it is found that the emphatic tendencies of students does not differ in terms of gender and grades; against that students' emphatic tendencies differ in terms of department, in the other words emphatic tendencies differ between Physical Education and Sports Teaching students, Sports Management Students and Coaching Education students.

Keywords: Empathy, Emphathic Tendency, Physical Education and Sports

# PP. 378 SUBJECTIVE WELL-BEING LEVELS OF TEACHER CANDIDATES: A RESEARCH AT ANADOLU UNIVERSITY PHYSICAL EDUCATION AND SPORTS TEACHING DEPARTMENT

<u>Dilek Yalız Solmaz</u><sup>1</sup>, Gülsün Aydın <sup>1</sup>

### Abstract

#### **Purpose**

Subjective well-being is defined as the psychological meaning of happiness. Subjective well-being is an individual's mentally and emotionally subjective positive assessment of their life and expressing a positive judgment. The happiness of the people who is at an educational stage that will substantially determine the careers of themselves and who is moving towards the adulthood especially the university youth means the happiness of children of the future of the country. The aim of this study is to evaluate the subjective well-being levels of teacher candidates in terms of different variables.

### Method

The research group consists of 115 students who study at 1st, 2nd, 3rd and 4th grades of Physical Education and Sports Teaching department. "Subjective Well-Being Scale" developed by Dost (2004) is used as the data collection tool in the study. Subjective well-being scale consists of 46 items and is aims to measure the subjective well-being levels of individuals. Subjective well-being scale is graded between 1 and 5 points range. Every item in this scale is analysed by being proportionalized between "(1) Not at all suitable" and "(5) Entirely suitable". In analyzing the data from the computer, in looking to achieve the objectives of the study the standart deviation and the means of subjective well-being scores of teacher candidates were calculated; and in order to determine if the subjective well-being levels of teacher candidates differ in terms of gender and grade, when two groups are compared

<sup>&</sup>lt;sup>1</sup> Anadolu University Faculty of Sport Sciences

by, "T test" is used. ANOVA is used if more than two groups are compared by. The significance level is accepted as .05 during the statistical analysis.

#### **Findings**

A significant difference is not found between male and female teacher candidates' subjective well-being score means [t(113)=1.40, p>.05]. And no significant difference is found between the subjective well-being levels in terms of students' grades [f=.13, p>.05].

#### Conclusion

After the research it can be told that the subjective well-being levels of teacher candidates does not differ in terms of gender, in other words subjective well-being levels between male and female students are at similar. Also, teacher candidates' subjective well-being levels does not differ in terms of student grades.

Keywords: Happiness, Subjective Well-Being, Teacher Candidates

# PP. 387 COMPETITION-RELATED MOTIVE FOR ATHLETES: AN EXAMPLE FROM A SUMMER SPORT SCHOOL

<u>Umit Doğan Üstün</u><sup>1</sup>, Mehmet Acet <sup>1</sup>, Adnan Ersoy <sup>1</sup>

#### Abstract

#### Aim

The aim of this study was to investigate competition related motivation of athletes in the extent of their gender and age.

#### **Material Method**

In this study as data gathering tool, in addition to personal information form Turkish version of Willis Competition-Related Motives in Sports Scale (1982) was used. Turkish adaptation study of the Willis scale was done by Tiryaki and Godelek in 1997.

## **Study Sample**

The sampling group of this study was consisted of 108 athletes who attended summer sport courses, held in Izmir, in 2013. The participants were chosen randomly and volunteered to participate in this study.

### **Data Analysis**

In the evaluation of the data descriptive statistic methods; frequency and percentage applied for the distribution of participants' personal information. One Sample Kolmogorov Smirnov applied for seeking normal distribution and also skevness and kurtois values examined. Lastly Two Way MANOVA parametric test applied to determine significant differences.

#### **Findings**

Participants' competition-related motives were the highest in motive for approaching success subscale and gender differences were found to be significant in motive for avoiding failure subscale in favour of females (p<0.05).

## Results

This study shows that females are much afraid of failure and avoiding failure motives them more.

### **Keywords: Competition-Related Motive, Gender, Age**

<sup>&</sup>lt;sup>1</sup> Dumlupınar University School of Physical Education and Sports

# PP. 401 AN INVESTIGATION OF INDIVIDUAL AND TEAM SPORTS REFEREES' RESILIENCE

 $\underline{\text{Atahan Altıntaş}}^1$ , Feyza M. Kara $^1$ , Selen Kelecek $^1$ , F. Hülya Aşçı $^2$ 

#### **Abstract**

**Objective:** The purpose of this study was to determine the resilience of referees in different branches, and compare their resilience with regard to the sport branches (individual / team sports).

**Methods:** For this purpose, 25 females ( $M_{age}$ =30.4±8.59) and 97 males ( $M_{age}$ =31.27±9.33), totally 122 referee ( $M_{age}$ =31.09±9.15) voluntarily participated in this study. Referees' resilience is determined by "Resilience Scale for Adults" (Basım & Çetin, 2011) and "Demographic Questionnaire" was administered to participants for gathering information about age, gender and sport branches.

**Results:** MANCOVA analysis was conducted to compare the referees' resilience with respect to their sport branches by controlling gender. This analysis indicated statistically significant difference in resilience between individual and team sport referees' (Hotelling's T = 0.18;  $F_{(6.112)} = 3.33$ ; p<.05).

Follow up univariate analysis revealed that individual sport referees had higher scores on structured style, perception of future, perception of self and social competence subscales of resilience than team sport referees (p<0.05).

**Conclusion:** In conclusion, individual sport referees are better in sustain their daily works, planning and organizing. Furthermore, it can be said that individual sport referees are more social, extrovert and they perceived themselves more positive.

Keywords: Resilience, Referees, Team Sports, Individual Sports

# PP. 449 ASSESSMENT OF PERSONALITY TRAITS OF PERFORMANCE TENNIS PLAYERS ABOVE THE AGE OF 18 ACCORDING TO GENDER

Erdal Demir $^1$ , Kadir Koyuncuoğlu $^1$ , Bilal Karakoç $^1$ , Hasan Abanoz $^1$ , Uğur Şentürk $^1$ , Hacı Ahmet Taşpınar $^1$ , Esra Yazıcı  $^1$ 

### **Abstract**

**Aim:** The purpose of this study is examining the relationship between gender variable and personality traits of performance tennis players 18 and above the age of 18.

**Method:** The research was conducted in accordance with scanning model. The research group were formed by 80 tennis players who are 18 and over the age of 18 and who have individual or club license and who participated to the performance tennis tournaments connected to Turkey Tennis Federation in 2013. The sports clubs in Istanbul where the research conducted are; Taç Sports Club (n=13), ENKA Sports Club (n=21), TED Sports Club (n=23) and Istanbul Tennis Club (n=23). 51,2% (n=41) of the research group was formed by female tennis players, and 48,8% (n=39) of the research group was formed by male tennis players. The mean age of the research group was 19,6. PERI Personality Inventory short form which is developed by Sevinç (2005) as a data collection tool and consists of 25 questions is used in the research. PERI personality inventory consists of five subcomponents; openness to experience, sense of responsibility, extroversion, compatibleness and emotional stability. It is seen in internal consistency analysis of PERI Personality Inventory that; Cranbach Alpha value was in high reliability (0,80  $\leq \alpha \leq 1,00$ ) category in sense of responsibility subcomponent, and in compatibleness, extraversion, openness to experience and emotional stability subcomponents it was in quite reliable (0,60  $\leq \alpha \leq 0,80$ ) category. The inventory was conducted to tennis players before or after trainings according to face to face technique by the researcher after getting permission by going to the

<sup>&</sup>lt;sup>1</sup> Başkent University Faculty of Health Sciences

<sup>&</sup>lt;sup>2</sup> Marmara University School of Physical Education and Sports

<sup>&</sup>lt;sup>1</sup> Çanakkale Onsekiz Mart University School of Physical Education and Sports

clubs.

**Findings:** According to the results obtained in the research; it was seen that; while Sense of Responsibility subcomponent of 18 year old performance tennis players had the highest average score (=4.32), Emotional stability subcomponent had the lowest average score (=3,31). With these results it is understood that performance tennis players are not lymphatic, they have difficulty in managing anger, they externalize their anger easily, they are not optimistic when things go wrong, they cannot tolerate criticism, they have difficulty in opposing their wishes and desires. Furthermore, independent group t test was performed because the research group showed normal distribution according to gender and according to these results there was significant difference found only in extraversion subcomponents in factor points of personality traits of performance tennis players (p<0,05). According to the results it is understood that; female tennis players like spending time with people, they don't like to remain in the background, they demand justice to the end, they persuade other people in line with their opinion, they don't like constant life, they like fun and adventure, they are witty and cheerful. There was no difference found in openness to experience, emotional stability, compatibleness and sense of responsibility subcomponents according to gender (p>0,05).

**Keywords: Personality, Personality Traits, Tennis, Performance Tennis** 

# PP. 451 ANADOLU UNIVERSITY PHYSICAL EDUCATION AND SPORT SCHOOL STUDENTS' EXPOSURING FACTORS TO VIOLENCE

Gülsün Aydın<sup>1</sup>, Dilek Yalız Solmaz <sup>1</sup>

#### Abstract

#### Aim of the Study

It is stated that violence at school is having a tendency to increase in Turkey. It is important to talk, think and study about this subject to determine the dimensions of violence at schools and to take precautions. The aim of the study is to determine the thoughts and attitudes of Anadolu University Physical Education and Sport School students about violence and the factors exposuring to violence.

#### Method

A questionnaire, consisted of two parts, was used in the study to collect the data. First part of the questionnaire is to determine the thoughts and attitudes of students about violence and the factors of exposuring to violence. Second part of the questionnaire is consisted of demographics characteristics of the students. Questionnaire was applied to a total of 199 first, second, third, fourth grades bachelor students at Anadolu University, Physical Education and Sports Teaching Department. SPSS 12 packet program was used for statistical analyze.

### **Results and Conclusion**

The sampling was of whom 41% were women and 59% were men. The results of this study show that, %1.28 of students pointed out that they have no friend, %14.10 they are in a group with 1-3 friends, %12.82 they are in a group with 3-5 friends, %71.80 they are in a group with 5 and more friends. The results also show that %92.30 of them defined that they take decisions together in the group and %3.85 of them defined that the cleverest one takes the decisions. According to answers about violence; they pointed out that they don't exposure to violence in their education life (%76.92), in their sport life (%71.80), at their special life (%93.59) but they pointed out that exposure to violence in their education life (% 23.08), in their sport life (% 28.20), at their special life (% 6.41). In brief, the results of the current study is exposuring in education and sport life is more than in special life.

In conclusion, students exposure to violence mostly by their teacher in their education life, by their trainers in their sport life and by their father at home. Future researches about violence and especially in sport could be extended to include a wider demographic base to further explore the extent to which the findings are generalizable.

Keywords: Violence, Violence Factors, Violence in Sport Life

<sup>&</sup>lt;sup>1</sup> Anadolu University Faculty of Sport Sciences

### PP. 460 THE MORAL MATURITY LEVELS OF STUDENT - ATHLETES

Arıkan Ektirici<sup>1</sup>, Dilek Yalız Solmaz <sup>1</sup>

#### **Abstract**

## **Purpose**

Moral maturity can be defined as a person's high levels of ethicalness in his/her thoughts, attitudes and behaviours. A person with moral maturity is expected to be honest, responsible, respectful, fair, helpful, self-controlled, sympathetic and most importantly to be a good citizen who obey the laws and the rules. The purpose of this study is to measure the moral maturity levels of student – athletes in terms of gender, age, perceived academic achievement and sport status.

#### Method

146 student – athletes who participated in the Intercollegiate Volleyball Premier League tournament that took place in Eskişehir between 30th April and 4th May involved in this study. "Moral Maturity Scale" developed by Şengün and Kaya (2007) were used the data collection tool in this study. Moral Maturity Scale consists of 66 items and aims to measure individuals' moral maturity levels. Moral Maturity Scale is graded between 1 and 5. Every item in this scale is analyzed by being proportionalized between "(1) No, Never" and "(5) Yes, Always". In analyzing the data from the computer, in looking to achieve the objectives of the study the standard deviation and the means of moral maturity scores of student – athletes were calculated; and in order to determine if the moral maturity levels differ in terms of gender, age, perceived academic achievement and sport status "T test" is used. ANOVA is used if more than two groups are compared by. The significance level is accepted as .05 during the statistical analysis.

# **Findings**

Statistically significant difference was found between the moral maturity score means of male and female student athletes [t(144)=2.18, p<.05]. No statistically significance was found between the moral maturity score means and age [f=1.36, p>.05]. No statistically difference was found between the moral maturity score means and perceived academic achievement levels [f=1.36, p>.05]. No statistically difference was found between the moral maturity score means and sport status [f=.12, p>.05].

#### Conclusion

After the research it is found that moral maturity levels of student – athletes does not differ in terms of age, academic achievement and sport status; in spite of that, it is found that moral maturity levels has a significant difference in terms of gender. The moral maturity levels of female are significantly higher than the male.

**Keywords: Moral Maturity, Sports Ethics** 

# PP. 480 EXAMINATION OF STRESS-COPING STYLES OF THE ATHLETES WHO PARTICIPATED IN KOÇ FEST UNIVERSITY SPORTS GAMES TURKEY IN TERMS OF GENDER, SPORTIVE BRANCH AND SPORTIVE EXPERIENCE

 $\underline{\text{Ziya Bahadır}}^1$ , Zehra Certel $^2$ , Atilla Pulur $^3$ , Kazım Kaya $^4$ 

### **Abstract:**

**Aim:** In performance sports, athletes undergo intense pressure and are affected by the competition environment. When athletes have high expectations and are struck with the idea that what if they cannot meet these expectations; they suffer from stress, too (Crocker, 1992). The studies that

<sup>&</sup>lt;sup>1</sup> Anadolu University Faculty of Sport Sciences

 $<sup>^{</sup>m 1}$  Erciyes University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Akdeniz University School of Physical Education and Sports

<sup>&</sup>lt;sup>3</sup> Gazi University School of Physical Education and Sports

<sup>&</sup>lt;sup>4</sup> Ahi Evran University School of Physical Education and Sports

examined the correlation between stress experienced by the athletes and their psychological adaptation pointed out the importance of coping in the negative effects of the stressors encountered in sportive competitions (Crocher, 1989; Madden, 1990). Coping is considered as a critical factor in organizing stress relations in sports and exercise settings. Perceived stressful events and their results caused by coping behaviors (positive and negative emotions) are dynamic and cognitive strategies that mediate between physical problems and performance (Crocher, 1992). General psychology researches show that stressors, assessment of stress and coping strategies used as a reaction against stressful events differ according to the cultures (Anshel et al., 1995; Anshel et al. 2001; Kim and Duda, 2003; Freydenberg et al., 2003). So, the current study was undertaken in order to support the studies that aimed at discovering the intercultural differences in this sense. The aim of the study was to identify stress coping ways used by athletes from different sportive branches in Turkiye in terms of sex/gender, sportive branch and sportive experience.

**Method:** The study was conducted with the athletes who participated in Koç Fest University Sports Games held between the 12th and the 18th of May, 2014 in Kayseri. A total of 860 athletes who did team sports (football:56, basketball:163, volleyball:73, handball:51, water polo:81) and individual sports (athletics:163, archery:44, swimming:106, gymnastics:64, orienteering:57) joined the study. 242 of the athletes were female and 618 were male. Mean age of the athletes (year=22.20±2.16) and mean sportive experience was (sportive experiences=8.58±4.126).

Stress Coping Inventory for Competitive Sport (SCICS) was used in order to assess the stress-coping strategies of athletes. The inventory developed by Gaudreau and Blondin (2002) in Canada was adapted into Turkish by Arsan (2007). The original form of the inventory includes 10 items. It is a five point-Likert scale (1=not used at all; 5=used very much). In the factor analyses of Stress Coping Inventory for Competitive Sport adapted by Arslan (2007); unlike the original edition, items in the Turkish form were clustered under six factors: Factor 1: Mental and Physical Effort, Factor 2: Relaxation/Mental Distraction, Factor 3: Seeking support, Factor 4: Avoidance, Factor 5: Social Withdrawal and Factor 6: Venting of unpleasant emotions. Higher scores indicate that athlete prefers the relevant coping strategy use more or more frequently in case of stressful events while lower scores indicate that athlete prefers the relevant coping strategy use less or never in case of stressful events. In the internal consistency reliability test of 39-item SCICS performed with 349 participants; correlation coefficient obtained with Cronbach Alpha was .85. In the current study; internal consistency reliability was calculated as .87 using Cronbach Alpha.

**Results:** It was found out that as far as sex/gender was concerned there were no statistically significant differences in terms of mental and physical effort (t=-.495, p=.621; p>.05), relaxation/mental distraction (t=-.954, p=.340; p>.05), seeking support (t=-.116, p=.908; p>.05), avoidance (t=-1.115, p=.265; p>.05) and venting of unpleasant emotions (t=-1.497, p=.3135; p>.05) among the athletes while there was a statistically significant difference in terms of social withdrawal (t=2.545, p=.011; p<.05). As far as sportive branches were concerned; there were significant differences in terms of physical effort [F(9, 850)=5.612, p=.000; p<.05], relaxation/mental distraction [F(9, 850)=2.257, p=.017; p<.05], seeking support [F(9, 850)=33.973, p=.000; p<.05], avoidance [F(9, 850)=10.576, p=.000; p<.05], social withdrawal [F(9, 850)=5.217, p=.000; p<.05] and venting of unpleasant emotions F(9, 850)=11.968, p=.000; p<.05]. Finally; significant differences were seen in avoidance [F(9, 850)=3.079, p=.027; p<.05], social withdrawal [F(9, 850)=3.030, p=.029; p<.05] and venting of unpleasant emotions [F(9, 850)=3.603, p=.013; p<.05] used for coping with stress according to sportive experience.

Keywords: Coping with Stress, Team Sports, Individual Sports

# PP. 494 NEW METHOD IN PSYCHOLOGICAL ANALYSIS FOR IMPROVING PERFORMANCE OF PLAYER IN BASKETBALL WITH COLLABORATION OF INFORMATION TECHNOLOGIES

Turhan Toros <sup>1</sup>, <u>Volkan Kadir Güngör</u><sup>2</sup>

### **Abstract**

**Aim:** The research aim to create a method which supplies to optimizing athletes performance in basketball with psychological analysis on information technologies based.

**Method:** Twenty games of Man Basketball League of Turkey was analyzed in 2013-2014 session. Three staff was noticed game detail in Scouting Papers on the game. Our computer sofware system was recorded active teams players information and game score in 30 seconds period in the game playing moment. Players Information is about, player name, player number, changing time, player score, playing duration and some other parameters. Record Players chaging time and scores were saved in sql database by using XML protocol. Data entry interfaces was develop by using C# software. The software making statistical analysis to recorded data and draw three different graphics to show high performance time periods of athletes.

**Results:** After the analysis, collaboration with shown in the table, Data Entry and Monitoring Interface, Period and Performance Graphics, Percentage Calculating Graphics and Psychological Performance Graphics

**Conclusion:** As this research result shows; Information technologies can be used in sports science and this multidisciplinary collaboration provided to easier and faster analyze capability and creating sports history memories by databases and more efficent statistical measurement about athlete psychological performance.

Keywords: Basketball, Psychological Analysis, Information Technologies, Scouting, Performance

# PP. 529 AN EXAMINATION OF SPORTS PARTICIPATION MOTIVES OF MIDDLE AND HIGH SCHOOL STUDENTS

Hidayet Suha Yüksel <sup>1</sup>, Perican Bayar <sup>1</sup>, <u>Onur Mutlu Yaşar</u> <sup>1</sup>

## Abstract

**Purpose:** The purpose of this study is to determine the sports participation motives of middle and high school students, and examine whether the student's motivation to participate in sports varies according to the student's stage of education, gender, and family support.

**Method:** The sample consists of 2135 students randomly selected from 9 different middle schools and 3 different high schools. Participation Motivation Questionnaire (PMQ) which was developed by Gill et al. (1983) was used to collect data. In this study, Cronbach's alpha reliability coefficient was determined to be 0.86, and frequency, mean and standard deviation values were used as descriptive tests. Further, the normal distribution of the data was tested with Kolmogorov-Smirnov test, and because the data did not show normal distribution, in order to determine the differences between binary variables the Mann-Whitney U test was applied as nonparametric test respectively.

**Findings:** In the study, the most important motivational factors for encouraging the participation of both the middle and high school students in sports were found to be "skill development" (middle:  $1,21\pm0,32$ ), (high:  $1,27\pm0,39$ ) and "movement/being active" (middle:  $1,23\pm0,39$ ), (high:  $1,29\pm0,46$ ). It has been seen that there is a significant difference between boys and girls with girls demonstrating higher levels in the subdimensions of "success", "fun", "friendship" and "movement/being active"

<sup>&</sup>lt;sup>1</sup> Mersin University School of Physical Education and Sports Department of Coaching Education

<sup>&</sup>lt;sup>2</sup> Toros University Computer Engineering

<sup>&</sup>lt;sup>1</sup> Ankara University Faculty of Sport Sciences

(p<0.05). When examined according to the student's stage of education, it has been found that middle school students show a significant difference in the subdimensions of "success", "fun", "friendship, "movement/being active", "team affiliation" and "skill development" and in other subdimensions with the exception of the "fun" subdimension (p<0.05). When the support of the family in the student's participation in sports is factored into the analysis, it has been seen that there is a significant difference in all subdimensions (p<0.05).

**Result:** Sports participation of school aged students through physical education classes, extracurricular sports activities and activities outside of school, play a very important role in their making physical activity and sports a part of their lives as they grow older. Therefore, determining the causes of children's sport participation, and preparing activities, plans and programs in line with this information, play a decisive role in children's fondness for physical activity, and thus in their further participation in sports.

Keywords: Participation Motivation, Middle School Students, High School Students

### PP. 547 AN ANALYSIS OF STYLES OF IMAGERY IN ELITE WRESTLERS

 $\underline{\text{Fatih Karakaş}}^1$ , Berna Mete Ergin $^2$ , Yasemin Çakmak Yildizhan  $^3$ 

- <sup>1</sup> Police Academy Ondokuz Mayıs Police Vocational School
- <sup>2</sup> Marmara University Department of Sports Management
- <sup>3</sup> Erzincan University Department of Sports Management

#### **Abstract**

The purpose of this study is to research the styles of imagery in elite wrestlers. The universe of the study consists of elite wrestlers who have joined the national team camp at least 10 times. 52 wrestlers participated in the study voluntarily. Imagery questionnaire which was adapted to Turkish athletes by Kızıldağ et al. was used in the study. Imagery questionnaire consists of four subscales as "Cognitive Imagery", "Motivational Specific Imagery", "Motivational General Arousal" and "Motivational General Mastery". SPSS ready software was used in the analysis of the data. Cronbach' Alpha value of the imagery questionnaire used in the study was found to be 0.78.

The majority of the athletes who participated in the study were between 17 and 19 years of age and they had been doing sports for six to nine years. When the averages of imagery subscales were analyzed in terms of the wrestlers' years in sports, the wrestlers who had been doing sports between 6 to 9 years had the highest average in the subscale of "motivational specific imagery" with an average of 5,64. Similarly, the subscale with the highest average in wrestlers who had been doing sports between 10 to 13 years was "motivational specific imagery". However, the subscale with the highest average in wrestlers who had been doing sports between 14 to 20 years was "motivational general mastery". When the wrestlers' years in sports and their imagery score averages were analyzed, it was found that the wrestlers who had been doing sports between 6 to 9 years had the highest average of imagery with 5,65. When the averages of imagery subscales were analyzed in terms of the wrestlers' age group, it was found that all age groups had the highest average in the subscale "motivational specific imagery". When the averages of imagery subscales were analyzed in terms of the participants' age groups, the highest average of imagery were in the participants of the age groups 23-25 years of age and 26-30 years of age. The subscale with the highest average was "motivational specific imagery" followed by "motivational general mastery". The average imagery score of the participants was found to be 5,45.

The significance found in the motivational specific imagery of the wrestlers with an experience of 6-9 years and 10-13 years can be resulting from these athletes' picturing themselves while being appreciated or while taking medals. Wrestlers have more consistent personality standards when their performances and the roles they define themselves with are consistent. The fact that the study group consisted of elite wrestlers and that their achievements have been continuing can be considered in this sense. The techniques that wrestlers of 10-14 have developed for various skills they encounter or how they respond to tactical problems that arise during the game can be effective in the significance of

motivational general mastery subscale. The fact that a person has been doing a skill for a long period of time can result in that skill becoming a normal act. Thus, the athlete will have more self-confidence and will be more comfortable during the competition.

As a conclusion, when the styles of imagery used by elite wrestlers are analyzed, it can be said that different styles of imagery are effective depending on the years in sport.

**Keywords: Elite Wrestlers, Imagery** 

# PP. 566 AN INVESTIGATION OF THE PARTICIPATION MOTIVATION OF AMATEUR AND PROFESSIONAL FOOTBALL PLAYERS

Erol Doğan<sup>1</sup>, Hamza Küçük <sup>2</sup>, Egemen Ermiş <sup>1</sup>

- <sup>1</sup> Ondokuz Mayıs University Yasar Doğu Faculty of Sport Sciences
- <sup>2</sup> Ondokuz Mayıs University Institute of Health Sciences

#### **Abstract**

#### Aim

The purpose of this study is to investigate the participation motivation of professional and amateur football players and to examine the motivational factors that make them participate in sport.

#### Methods

The study included 61 amateur football players who had a footbal history of at least 7 years and 57 professional football players who participated in contests professionally at least for 5 years. The data was collected through "Participation Motivation Questionnaire" which was developed by Gill in 1983 and tested for Turkish validity and reliability by Oyar et al. The questionnaire had 30 items and 8 factors.

#### **Findings**

Cronbach Alpha internal consistency of the questionnaire was found to be 0,823. The analysis results showed that the most important factors that affected the professional football players' participation motivation were "achievement" (1,08), "skill development" (1,11), "competition" (1,19), "energy release" (1,26), "affiliation" (1,32), "friendship" (1,35), "fitness" (1,36) and "fun" (1,45). As for the amateur football players, the most important factors that affected their participation motivation were "affiliation" and "energy release" (1,19), "achievement" (1,21), "skill development" (1,26), "friendship" (1,31), "competition" (1,32), "fun" (1,38) and "fitness" (1,39). According to the results of the t-test that was conducted to determine the factors that affected the participation motivation of the football players groups in the study, a significance was found in the factors of "achievement", "competition" and "skill development" in favor of the professional football players (p<0,05). A significance was found in the "team atmosphere" factor in favor of amateur football players (p<0,05).

#### **Results**

When the factors that affect the participation of professional football players are examined, achievement factor can be seen as the leading factor. This situation can be considered as normal for professional football players. An association can be made between achievement and the income. In addition, the professional athletes who win will have a chance to compete with a better income. Similarly, it is normal to think that sponsorships and advertisement incomes will go to winning athletes. The football players who becomes more popular with competition will have the chance to get more income and to have more achievement. Besides, skill development and new skills are inevitable for achievement. However; for amateur football players affiliation is the leading factor. Financial gain is not expected from amateur sports. Instead of financial gain, different motivational factors arise. One of these factors is the team atmosphere factor, which is one of the factors found to be important for amateur football players in this study. Professional athletes can individualize in order to win; however, amateur athletes can be motivated by social factors since they are not doing this sport as an occupation. Similarly, although there was no statistical difference for amateur football players in energy release factor, a numerical difference can be found in favor of amateur athletes. This can be caused by the fact that they are not doing this sport as an occupation and by the motivation that it is done by the motive

of "energy release" in order to be healthy. As a conclusion, it can be said that amateur and professional football players are affected from different motivational factors.

**Keywords: Football Players, Motivation, Participation of Sports** 

# PP. 630 EXAMINING THE MOTIVATION IN SPORT PARTICIPATION OF 11-14 AGE GROUP STUDENTS IN TERM OF GENDER

Ali Aycan <sup>1</sup>, Kadir Yildiz <sup>1</sup>

Abant İzzet Baysal University School of Physical Education and Sports

#### **Abstract**

The purpose of this study was to examine the motivation of 11-14 aged students in sport participation. Total of 149 students (70 female and 79 male) at 11-14 age range who play in school teams, participated in this study. Their average age was 12,79±0.95 years.

Participation of Motivation Questionnaire (PMQ) developed b Gill, Gross and Huddleston (1983) that consists of 30 items was used to collect data in this study. PMQ was adapted to Turkish by Oyar, Aşçı, Çelebi and Mülazımoğlu (2001).

SPSS 17.0 (Statistical Packages for Social Sciences) was used to analyse the data. Difference in sport participation motivation between male and female students was determined by Independent Sample t-Test.

Results showed that there were significant differences between 11-14 aged male and female groups in "success" and "competiton" sub-dimensions of motivation in sport participation. It was determined that male sudents have higher motivation in sport participation comparing to female students in two sub-dimension. In other words, the importance of winning, struggling and gaining a status by means of sports for male students who play in school teams was revealed in sport participation.

**Keywords: Sport, Motivation, Sport Participation** 

# PP. 633 THE EFFECTS OF ALEXITHYMIA ON SELF-ESTEEM AND PHYSICAL SELF-PERCEPTION OF ERCIYES UNIVERSITY INDOOR SOCCER TEAM PLAYERS

# Serdar Sucan<sup>1</sup>

### Abstract

Purpose: The purpose of this study was to determine the effects of alexithymia on self-esteem and physical self-perception of Ercives University indoor soccer team players. Methods: A total of 32 athletes (16 men, 16 women) who were enrolled in universities indoor soccer team participated in this study voluntarily. Sociodemographic data collection form, Toronto Aalexithymia Scale-26, Coopersmith Sef-Esteem Scale and Physical Self-Perception Scale was applied to the participants. SPSS 20.0 for Windows was used to evaluate data. Results: Participants in the study, 50% of athletes between the ages of 21-23, the ratio of those with 5-7 years of age sport 34,4%, those with a large family to 68.8% and the rate of those who use alcohol 65.6% was seen. Quite average of alexithymia levels obtained points found 78.69%. 84.3% of athletes who participated in the study, alexeitimik was seen. When looking at the average score received from the CBSE, athletes at intermediate level proved to have a level of self esteem. KFAE is the average score obtained from looking at them, athletes in general perceive themselves as was sufficient. The study groups include TAÖ-26, CBSE and KFAE found a statistically significant difference between points. Alexithymia levels with gender, self-esteem and physical self perception of the lower dimensions, physical condition, the body was associated with glamour and strongly. Conclusion: Athletes alexithymia levels, self-esteem and physical selfperception is the physical condition of the lower dimension, was the effect on the strength and appeal

<sup>&</sup>lt;sup>1</sup> Erciyes University School of Physical Education and Sports

of the body. High self-esteem seen in athletes, and the physical self perceptions, their performance is known to affect in a positive direction. Accordingly, self-knowledge, is difficulty in thinking for export and tell a persons pattern for high levels of alexithymia, which is athletes performance we think that it will affect in a negative way. Therefore needed to decreasing levels of alexithymia in athletes, the coaches and coaching should take place among the fundamental tasks of the operation.

Keywords: Sport, Indoor Soccer, Alexithymia, Self-Esteem, Physical Self-Perception

# PP. 641 EXAMINING THE LEARNING STYLES OF PHYSICAL EDUCATION AND TEACHING DEPARTMENT STUDENTS

Nurullah Çelik<sup>1</sup>, <u>Hakan Kolayiş</u> <sup>1</sup>

#### **Abstract**

One of the parameters that scientists' intensively have emphasized is the learning styles since the quality of teaching and learning process and its effect on the formation of learning. According to Fidan (1986) in the studies related to education, basic principle is the efficiency of learning-teaching process and providing learning for students in an easy, efficient and available way. To reach to this purpose, each learning style should be known and accordingly one should apply new approaches in learningteaching activities and comtemporary teaching methods by the help of developing and changing technology (Tazegül, 2008). The purpose of this study is to investigate the learning styles of physical education and sport teaching department students at Sakarya University. Accordingly, total number of 75 students participated in the study voluntarily. Subjects in the study consist of students studying at the first, second, third and forth grade levels of physical education and sport teaching department. The study is a descriptive survey model study. As a measuring tool in the study, for detecting the learning styles, Learning Style Inventory(LSI), which was developed by Kolb (1984), was used. In the Inventory, which was adopted into Turkish by Aşkar and Akkoyunlu (1993), 4 learning style that was stated in Kolb Learning Style Model was defined. The inventory consists of 12 items with 4 options. It requires from the individuals to rank 4 learning styles defining their learning styles the best. In the analysis of data, frequency, percent values and chi square independence test techniques were used. At the end of the analysis, %44 of students preferred converger style, %34,66 preferred assimilator style, %16 preferred diverger style and %5,33 preferred accommodator style learning. As a result of the study, physical education and sport teaching department students have the diverger style learning and following this assimilator style learning style at most.

Keywords: Physical Education, Learning, Learning Styles.

# PP. 647 THE EFFECT OF PARTICIPATION TO RECREATIONAL ACTIVITIES ON JOB SATISFACTION

<u>Gizem Karakaş</u><sup>1</sup>, Hakan Kolayiş <sup>1</sup>, İhsan Sarı <sup>1</sup>

#### **Abstract**

Purpose of the study: Relevant literature indicates that recreational activities positively affect many psychological and physiological components. Thus, the purpose of this research was to examine the effect of participation to recreational activities on job satisfaction.

Methodology: 223 academic staffs working at a university voluntarily participated to the research. Mean age of the participants was 34,93±9,23 and mean experience was 9,42±8,56. The Survey of Participation Type and Level to Recreational Activities which was also used in Pala (2012) was used to measure participation to recreational activities. Job satisfaction was measured by Minnesota Job

<sup>&</sup>lt;sup>1</sup> Sakarya University School of Physical Education and Sports

<sup>&</sup>lt;sup>1</sup> Sakarya University School of Physical Education and Sports

Satisfaction Questionnaire (Weiss et. al, 1967). SPSS 17. Program was used in data analysis. Descriptive statistics and chi-square test were used. Significance level was determined to be 0,05.

Findings: There was found significant differences on internal, external and general job satisfactions in terms of preferring sport facilities in leisure time while practicing sports of academicians had no significant effect on job satisfaction (p>0.05). Watching sports competitions was found to effect external job satisfaction. Significant differences were observed on internal and general job satisfactions of the participants according to preferring recreational activities to be in a nice environment. Joining outdoor activities and walking in the parks/markets/fairs etc. effect external job satisfaction (p<0.05). Joining recreational activities to live in a healthier way has no significant effect on general job satisfaction. Significant differences were found on internal, external and general job satisfaction with respect to joining recreational activities alone (p<0.05). It was determined that joining recreational activities to relax and to get away from working environment does not affect job satisfaction (p>0.05).

Conclusion: Considering all the results obtained from this research, it could be stated that joining recreational activities affect job satisfaction in some parameters.

Keywords: Recreational Activity, Job Satisfaction, Academic Staff

# PP. 655 DIFFERENT AUDIENCE PROFILE ON FOOTBALL MATCHES PLAYED OF DISCIPLINARY PRACTICES IN TERMS OF COMPARISON

Muhammed Zahit Kahraman <sup>1</sup>, Arslan Kalkavan<sup>2</sup>, <u>M. Fatih Bilici</u> <sup>3</sup>, Ömer Faruk Bilici <sup>4</sup>, Sezer Cacim <sup>5</sup>

- <sup>1</sup> Police Academy Bitlis Vocational School
- <sup>2</sup> Karadeniz Technical University School of Physical Education and Sports
- <sup>3</sup> Ministry of National Education Şamran Anatolian High School
- <sup>4</sup> Ministry of National Education Van Sports High School
- <sup>5</sup> Ministry of National Education Mustafa Kemal Secondary School

### Abstract

**Purpose;** Turkey Football Federation, Football Competition Instructions for making changes to the 2011-2012 season for the first time in the competition spectators watched by women and children under the age of 12 to have allowed. However, this practice was removed from the instructions prior to the 2014-2015 season. The aim of this study applied three seasons spectators competitions (women and children audiences) and the spectator (mixed audience) is compared in terms of disciplinary practices of competitions.

**Method;** in this study, Turkey Football Federation 2011-2012, 2012-2013 and 2013-2014 season in the Super League competition from the spectator 150, audience (women and children in the audience) 27 competition with a total of 177 competition was investigated. Turkey Football Federation, Football, generated by the Management System (FYS) at each event of the records belonging to the Federation officials, referees and observers by the entry is made of the knowledge base. In the study, 177 event data belonging to the official website of the Football Federation of Turkey competition on the basis of examined and taken. The analysis of the data obtained in this study using the SPSS statistical program was used. Statistical analyses descriptive statistics and  $\alpha$ =0.05 level of significance t-test was applied **Findings;** the results of descriptive statistics are examined, the average yellow card Super League spectator competitions 4,75±2,10 audience in the event 3,63±1,57, respectively. The red card Super League average spectator competitions 0,22±0,46 audience competitions is to 0.29±0,46, respectively. **Result;** in conclusion, the Super League competitions yellow card application, women and children of spectators watched the competition in the mixed audience (intensive male) followed competitions according to the significantly lower occurred, Super League competitions red card in the average women and children of spectators watched the competition with the mixed audience (intensive male)

that follow to be pointless if the difference between competitions have been identified. Therefore, women and children, followed by the continuous violation of the rules of the game in all competitions unsporting behavior, the objections made to the referee competitions can be said that less.

Keywords: Football, Women, Children, Audience, Application of Discipline

#### PP. 659 AS PART OF AGGRESSION AND VIOLENCE IN SPORTS: HOOLIGANISM

Osman Gümüşgül<sup>1</sup>, Mehmet Acet <sup>1</sup>, Adnan Ersoy <sup>1</sup>

### **Abstract**

#### Aim

The aim of the study is to examine the concept of hooliganism, one of the important social problems of football game which is one of most popular sport in Turkey as world wide.

#### Method

The study is an example of review study. As gathering tool, hooliganism events in Turkey and other countries have been examined and national and international literature review have been applied. Besides, function of solutions have been proposed until now have been discussed if they are available to carry out.

# **Findings**

According to terminology, it is possible to align viewers have their places at stadiums and joining football games passively as spectator, supporter, fanatic and hooligan at top. Spectator is described as random person who watches an sport evident at stadiums, on video or on television. Supporter is described as consumer related to sport evident emotionally. Fanatic is described as person that doesnt see realities of football game, devoid of common sense, noisy, tries to fight always and thinks opponent viewers are enemies and try to get their attention. Hooligan is describes as a person has extreme fanatism in sports; prone to damage to society, tramp, someone who is good for nothing.

#### **Discussion and Result**

It is so clear that aggression and violence in sports is not such a problem that can be overlooked and delayed. Unsuccess of solution tries in the short-term discourage possible long term tries and studies. It is not easy to create a new culture in a country. It has been seen that sport culture in Turkey is not at advanced level. People who thinks sport as watching football especially three big teams matches on super league on television, are not a few. Besides, it has been observed that socio-economic differences within people create hate, anger and hatred and they reverberate to stadiums. Between reasons of hooliganism in Turkey, unconscious sports managers, sport media, football federation, inadequate stadiums, officers, players fight at pitch time to time and existing laws can be said.

Keywords: Sports, Hooliganism, Aggression and Violence in Sports

# PP. 666 THE INVESTIGATION OF REALIZATION LEVELS OF EXPECTATIONS AND REASONS OF TENNIS ORIENTATION INDIVIDULAS WHO ENGAGED IN AMATEUR TENNIS SPORT IN DIYARBAKIR

Canan Gülbin Eskiyecek<sup>1</sup>, Özlem Yenigün <sup>2</sup>

### Abstract

**Aim:** The purpose of this research is to determine their expectations from the sport with yhe factors that led to the sport orientations and reasons why orientations to the sport of tennis man and woman

<sup>&</sup>lt;sup>1</sup> Dumlupınar University School of Physical Education and Sports

<sup>&</sup>lt;sup>1</sup> Ministry of National Education Physical Education and Sports Teacher

<sup>&</sup>lt;sup>2</sup> Kocaeli University School of Physical Education and Sports

individuals who play tennis as an amateur in Diyarbakır. Method: The study was participated 39 women 82 men including a total of 121 as volunteer amateur tennis player. Data were obtained through a survey. The survey used in the study was developed by Sunay and friends. Validity and realibility coefficient of the survey was considered to be 8434. 30 questions the partial the Cronbach's alpha value (α) with prepared by the survey 5-point Likert scale is 899. Individuals who participated in the study gender, marital status, age, educational status and monthly income insight on the difference between whether it's important in order to determine t test, one-way analysis of variance (ANOVA) and Tukey test was performed. Surveyed participated individuals' gender, marital status, age, educational status and monthly income insight on the between difference whether it's important in order to determine t test, one-way analysis of variance (ANOVA) and Tukey test was performed. While statistical analysis of the scoring scale; one-way analysis of variance (ANOVA) and Likert-type grading scale scoring on Tukey's test is not considered to be a value, 2nd, 3rd and 4th substances in section to their answers of amateur tennis players were collected among themselves. The sum of the expectations from tennis, the sum of the purposes for being interested in tennis, the sum of the factors that encouraged them to play tennis are grouped into and statistical analyzes were performed in this manner. Also the data obtained from the survey of the frequency percentage and mean distributions were calculated and interpreted.

Findings: According to the research results; % 32.3 amateur tennis players are female, & 67.8 male, % 41,3 are between 18-25 years old, % 48,8 are between 26-40 years old, % 9,9 of them are between 41-65 years old, % 34,7 are married, % 65,3 are single, % 10,7 are graduated from high school, % 73,6 are bachelor's degree, % 10,7 are postgraduate, % 5 are from doctoral degree and lastly % 47,1 of them have played tennis 1-2 years, % 26,4 have played 3-4 years, % 13,2 5- 6 years, % 3,3 7-8 years, % 9,9 have played 9 years and more. A meaningful statistic difference has been found on level of p < 0.05 according to the sexuality opinions of amateur tennis player participants' in terms of their expectations from tennis, the purposes for being interested in tennis and the total elements that encouraged them to tennis. About these matters, the opinions of tennis players who participated the survey have been similar on sexuality variable. There has been a meaningful statistic difference on level of p < 0.05 according to the marital status of amateur tennis player who participated the research. It can be said that the single players' expectations are more respondenn than the married ones. And again on the same table, amateur players' purposes for being interested in tennis as amateurs and the total elements that encouraged them to play tennis show a meaningful statistic difference on level of p < 0.05 according to marital status. On the other side, about marital status, the participants' opinions about these matters have been nearly similar. There has been a meaningful statistic difference on level of p< 0,05 according to the ages of the amateur tennis player participants' in terms of their expectations from tennis, the purposes for being interested in tennis and the total elements that encouraged them to play tennis. To establish among which groups, the difference exist, Tukey HSD multi-comparison test has been applied and the groups have been compared. According to Tukey HSD test results when looked at the biggest difference; the total expectations of tennis playes who are between 41-65 years old (X=24,42), the reasons for being interested in tennis as amateurs among players between 18-25 years old (X=39,46) in comparison with the players who are 41-65 years old (X=31,92) and the total elements which encouraged them to play tennis among the players who are between 18-25 years old (X=37,98) in comparison with 41-65 years old (X=25,83) and their opinions about relevant matter have been realized in a better way. The amateur tennis player participants' total expectations from tennis and their purposes for being interested in tennis as amateurs have showed a meaningful statistic difference on level of p < 0.05 in terms of their educational status. To establish this difference Tukey HSD multi-comparison tast has been applied and the groups have been compared. According to Tukey HSD test, it has been seen that the expectations of the players who are graduated from high school (X=39,77) in comparison with the players who graduated from doctoral degree (X=23.33) and their purposes for being interested in tennis as amateur among the players who graduated from bachelor's degree (X=38,21) in comparison with the players who're graduated from doctoral degree (X=30,33) have realized in a much better way. The total elements which encouraged them to play tennis haven't showed a meaningful statistic difference on level of p < 0,05 in terms of educational status.

**Result:** At the end of research it has been determined that in Diyarbakır, firstly amateur tennis player's expectations for being a trainer and a popular sportsman are high; mass media implements such as

television and press instruments and also families and physical education teachers have a quite small effect on orienting tennis. Also it has been determined that the opinions on surviving a comfortable life as a reason for being in interested in tennis are quite efective. In this study it has emerged it is more positive level for single than married tennis players the expectations from tennis. Graduates of high school or equivalent has emerged that their goals to obtain both popularity and financial income of the sport of tennis. It has appeared that it is more important for them to be trainers and to find the real happiness in tennis. And it has been thought that this isn't because of the sexual factor but because the age groups of this research are different from the age groups of other researches.

Keywords: Tennis, The Expectations From Tennis Sport, The Purposes for Being Interested in Tennis, The Factors That Encouraged The Sport of Tennis

# PP. 678 INVESTIGATING PHYSICAL EDUCATION AND SPORTS MAJORS' HAPPINESS LEVEL WITH REGARD TO VARIOUS VARIABLES

Cem Y. Yılmaz <sup>1</sup>, Leyla Yılmaz <sup>2</sup>, Ayten Acun <sup>1</sup>, Eren Uluöz <sup>1</sup>

#### **Abstract**

### Aim:

The purpose of this study was to examine physical education and sports majors' happiness level with regard to students' sex and department.

#### **Method:**

Totally 293 undergraduate students, 108 female and 185 male, participated in the study. Mean age of participants was  $22.59\pm2.53$  ( $\bar{x}_{female}$ =  $21.90\pm2.31$ ,  $\bar{x}_{male}$ =  $22.99\pm2.57$ ). Of the participants, 33.4% were from Physical Education Teacher Education Department, 33.4% from Sport Management Department and 33.1% from Trainer Education Department. Subjective Happiness Scale was used to collect data. Scale was developed by Lyubomirsky and Lepper (1999) and adapted into Turkish by Doğan and Totan (2013). The scale measures the levels of individual happiness by using 4 items using a 7-point Likert-type scale. In order to determine happiness level, participants were required to characterize themselves by rating each item. Total happiness score was calculated by adding up scores of 4-items. The minimum possible scores is 4, with the maximum score being 28.

#### **Findings:**

In order to determine subjective happiness level of participants, independent t-test was conducted. The results of the analysis showed statistically significant difference between female and male students' subjective happiness levels, t(291)=-2.89, p<.05. According to these results, females' ( $\bar{x}=19.50\pm4.58$ ) were found to have significantly higher subjective happiness scores than males ( $\bar{x}=18.02\pm4.03$ ). One way analysis of variance (ANOVA) was utilized to determine whether belonging to one specific department (Physical Ecucation Teacher Education, Sport Management, Trainer Education) matters in participants' subjective happiness level. Results of the analysis demonstrated that, students of different departments did not differ in the subjective happiness level, F(2,290)=.16, p>.05. Accordingly, participants' majoring in Physical Education Teacher Education ( $\bar{x}=18.57\pm4.01$ ), Trainer Education ( $\bar{x}=18.73\pm4.62$ ) and Sport Management ( $\bar{x}=18.39\pm4.27$ ) obtained similar subjective happiness scores.

### **Conclusion:**

These findings showed that, although sex differences were obvious in subjective happiness level, both female and male students' happiness levels were high. These results thought to be due to the students' interaction with physical education and sports activities and it is suggested that future studies should address happiness levels of students from different departments.

Keywords: Happiness, Subjective Happiness, Physical Education, Sport

<sup>&</sup>lt;sup>1</sup> Çukurova University School of Physical Education and Sport

<sup>&</sup>lt;sup>2</sup> Mersin University School of Physical Education and Sport

# PP. 681 4 REFEREE AND REFEREE 6 MANAGED WITH THE DISCIPLINE OF FOOTBALL MATCHES IN TERMS OF APPLICATION COMPARISON

Muhammed Zahit Kahraman  $^3$ , Arslan Kalkavan  $^2$ , Nurullah Emir Ekinci $^1$ , Osman Sari  $^4$ 

#### **Abstract**

**Purpose;** 6 Managing the last 2 years with the referee football matches organizations with some cups and leagues began to be implemented. Changes to the rules of the game in the first match of the football match referee, two assistant referees, fourth official and one with two additional auxiliary manageable. 6 peer system in Turkey in the 2013-2014 season in the Super League competition has been applied and will continue to be implemented in the 2014-2015 season. The purpose of this study, 4 referee and 6 refereed led yellow card and red card in football competitions is to compare average.

**Method;** Turkey Football Federation Super League competitions in the study of the 4 refereed managed 306 from the 2012-2013 season, the 2013-2014 season 306 of managed 6 refereed competitions with a total of 612 events were investigated. Created by Turkey Football Federation Football Management System (FYS) Federation of the records of each competition officials, referees and observers made of the information input by the bank. In this study, the data of 612 competitions Turkey Football Federation official web site taken on a weekly basis and some have been reduced to competitions. Analysis of the data obtained in the study was performed using the SPSS program. In the statistical analysis of data, descriptive statistics and t-test at a significance level  $\alpha$ =0.05 was applied.

**Findings**; analyzing the results of descriptive statistics, an average of yellow cards 4.73±0.78 in 4 peer-reviewed competitions is 4.35±0.81 in 6 peer-reviewed competitions respectively. Red card on average 0.22±0.12 4 refereed competitions are in competition 6 refereed 0.31±0.18 respectively.

**Result;** in conclusion, the football competitions in the red card application 6 with the referee managed in competitions 4 with the referee managed in competitions significantly (P < 0.05) in a manner more occurred, a yellow card in the average 4 referees ruled by competition with 6 referees governed by the competition of the difference between the insignificant (P > 0.05) were found to be. Therefore, the additional assistant referee system in terms of disciplinary action from 4 refereed system has been found to be completely different.

**Keywords: Football, Referee, Disciplinary Practice** 

# PP. 684 GENDER DIFFERENCE IN COINCIDENCE ANTICIPATION TIMING: EFFECT OF EXERCISE INTENSITY AND STIMULUS SPEED

Foad Alaei<sup>1</sup>, Sadettin Kirazcı<sup>1</sup>

#### **Abstract**

The purpose of this study was to investigate the impact of exercise intensity at different stimulus speed on Coincidence Anticipation Timing (CAT) performance with respect to gender in adolescent badminton players. The research questions were (1) What is the effect of exercise intensity on CAT with respect to gender? and (2) What is the effect of stimulus speed on CAT with respect to gender? 41 badminton players were randomly assigned to two groups consisting of 20 males (mean age=13.6) and 21 females (mean age=14.3) adolescents between 11 to 15 years old. The players had a minimum of three years badminton playing experience. Based on the prior researches (Lyons, Al-Nakeeb, & Nevill, 2008; Duncan, Smith, & Lyons, 2013) coincidence anticipation timing was measured using

<sup>&</sup>lt;sup>1</sup> Dumlupınar University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Karadeniz Technical University School of Physical Education and Sports

<sup>&</sup>lt;sup>3</sup> Police Academy Bitlis Police Vocational College

<sup>&</sup>lt;sup>4</sup> Ministry of Sport and Youth Ağrı Youth Centre

<sup>&</sup>lt;sup>1</sup> Middle East Technical University Education Faculty Physical Education & Sports Department

Bassin Anticipation Timer (BAT) under rest, following moderate- and high-exercise intensity exercise (indicated as 70% & 90% of Heart Rate Reserve, HRR respectively) and at two stimulus speeds of low (1 mph) and high (5 mph) velocities. The players were asked to run on a treadmill using an incremental running protocol until they reached a steady state of 70% and 90% of HRR thresholds. The stimulus speed and exercise intensity were both counterbalanced in this study.

After a brief explanation of the test protocol and warm-up, participants were given 3 CAT trials on each stimulus speed to familiarize themselves with BAT device and the test protocol. According to the previous studies (Lyons et al., 2008; Duncan et al., 2013), resting heart rate (HR\_rest) was obtain from each participant by getting them to lie down in a prone position for 10-15 minutes while wearing a heart rate monitor in a quiet room void of visual or auditory distractions. Maximum heart rate (HR\_max) was also estimated as 206.9 minus the participant's age multiply by 0.67. Both HR\_rest and HR\_max were then used to record and calculate 70% and 90% HRR. Raw scores were transformed into two error scores (Absolute Constant Error, |CE| and Variable Error, VE).

The results of two-way 2 (Gender)  $\times$  2 (Stimulus Speed) repeated measure analysis of variance on |CE| scores indicated that there was a significant gender  $\times$  stimulus speed interaction (F1,19=6.756, P=.018). Two-way repeated measure analysis of variance on VE revealed that there were statistically significant differences between gender (F1,19=5.426, P=.031), stimulus speed (F1,19=6.657, P=.018), and a significant gender  $\times$  stimulus speed interaction (F1,19=6.703, P=.018). The results of two-way 3 (Exercise Intensity)  $\times$  2 (Stimulus Speed) repeated measure ANOVA on |CE| scores indicated that there were no significant exercise intensity, gender and exercise intensity  $\times$  stimulus speed interaction. Finally, the outcomes of two-way 3 (Exercise Intensity)  $\times$  2 (Stimulus Speed) repeated measure ANOVA on the VE scores depicted that there was a significant different between stimulus speed (F1,40=15.375, P<.05).

The results of this study indicated that male and female adolescent badminton players are different in terms of their performance on coincidence anticipation time that males are faster than females and that males perform better after high intense running.

Keywords: Coincidence Anticipation Timing, Gender, Exercise Intensity, Stimulus Speed

# PP. 690 A STUDY ON THE COMPARISON OF PROBLEM SOLVING SKILLS OF FEMALE AND MALE WEIGHT LIFTERS SUBJECT TO GENDER AND EDUCATIONAL LEVEL

<u>Aylin Daşdelen</u><sup>1</sup>, F. Yeşim Körmükçü <sup>1</sup>, Hakan Akdeniz <sup>1</sup>, Hülya Adalı <sup>1</sup>, M.Oğuzhan Okumuş <sup>2</sup>

#### Abstract

**Purpose:** This study is conducted in order to determine the problem solving abilities of athletes in weight lifting branch, and to investigate whether these problem solving skills differ subject to gender and educational level.

Methods: This study was a descriptive study. A total number of 30 athletes, who were engaged in weight lifting branch as a team or individually, amateurishly or professionally, across Turkey in 2014, were selected as participants for this study. These participants were composed of athletes who are national team level, have Europe and World degrees and experienced in Olympics, as well as athletes who have degrees in Turkey and local championships. A personal information form, Problem Solving Inventory, developed by Heppner and Petersen (1982) was used as the data collection tool. The scope of inventory was created as 6-point Likert scale out of 35 subjects. Some of the subjects had positive statements and others have negative statements. The scale showed the total points (point for the perception of problem solving skill) and points of sub-dimensions. Answers were valued from 1 to 6 points. The point range of the inventory was between 32 and 192. The higher the total scores were, the less capable the athletes perceived themselves in terms of problem solving skills. The data was analyzed by SPSS. Descriptive statistics calculutions were made with the data. T-test and ANOVA were used as well to determine the difference between independent variables, and digital data were

<sup>&</sup>lt;sup>1</sup> Kocaeli University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Boğaziçi University Faculty of Letter and Sciences

interpreted with charts.

**Results:** There is a significant difference for "planned approach" sub-dimension points in terms of gender. ( $t_{(28)}=2,977$ ; p<0,05). Morover, results show that female weight lifters ( $\bar{x}=9,55$ ) have higher scores than male weight lifters ( $\bar{x}=7,40$ ).

When their problem solving skills are analyzed subject to gender, a significant difference is found for planned approach problem solving skills of female weight lifters  $[F_{(1-28)}=8,864, p<0.05]$ , however no such difference is found for the other sub-dimensions. When their problem solving abilities are analyzed subject to educational level, no such significant difference is found for any sub-dimensions of the Problem Solving Inventory.

**Conclusions:** Consequently, weight lifters do not differ in problem solving skill subject to their gender and educational levels.

Keywords: Problem Solving, Weight Lifting, Gender

# PP. 57 THE EFFECT OF BOVINE COLOSTRUM USAGE ON SERUM IMMUNOGLOBULINS AND PROTEIN LEVELS IN BASKETBALL PLAYERS

Ali Osman Kıvrak <sup>1</sup>, Gürkan Uçar <sup>2</sup>

#### **Abstract**

Purpose: This study was done to investigate the effect of bovine colostrum usage on serum immunoglobulins and protein levels in basketball players.

Method: 24 male basketball players from students at Physical Education and Sports in Selçuk University participated in this study. These players were divided into two groups including a control group of 12 persons and an experimental group of 12 persons. The sportsmen's blood samples were taken for the research three times (at 0<sup>th</sup>, 30<sup>th</sup> and 60<sup>th</sup> days), the serum immunoglobulins (IgG, IgA, IgM, IgE) and the proteins (Albumin, Globulin, Total Protein) were analyzed using standard methods. Moreover, the statistical analyses were done for the experimental and control groups in the basketball players with the SPSS 15 program and evaluated as well.

Results: When considered the results, it was determined that there were increases in the average amounts of Serum IgG, IgE, Globulin, Total Protein. However, a significant decrease was found in the Serum IgM. And it was found out that there were differences in the globulin amount and the total protein values (p<0.05) between the control and experimental groups using colostrum.

Conclusion: It has been suggested that future researches on colostrum will be suitable for various sports branches and different age groups considering especially sportsmen' criteria such as immunity, regeneration, performance. Thus, the sportsmen will benefit from the outstanding characteristics of colostrum at a maximum level, the success will be achieved more in this way.

\*This study is produced from the doctorate thesis supported by scientific research projects coordination unit (Project number:10102031)

Keywords: Colostrum, Basketball, Immunoglobulin, Protein

# PP. 75 DOPING IN ATHLETES IS TO EXAMINE THE EXTENT OF THE FACTORS THAT LEAD TO ROUTING

Mehmet Fatih Eröz <sup>1</sup>, <u>Tahir Kılıç</u> <sup>1</sup>, Çetin Özdilek <sup>2</sup>

## Abstract

The aim of our research on doping in athletes is to examine the extent of the factors that lead to routing. Study group of this research have been consisted of 4 different group total  $120 \, (N=120)$  sportman as being the athletes, wrestlers, judocus and lifters who sport national level. The sample of the study, group total  $120 \, (N=120)$  sportman have been successfull in their branches who sport national level.

The athletes who participating in questionnaire considering the age distribution most of the experimentals % 16,7 of rate have been fixed to 18 age groups, % 13,3 of rate have been fixed to 17 age groups, % 10 of rate have been fixed to 22 age groups. (X2.05(16) = 67,567; P<0,000). The athletes who participating in questionnaire examine the gender distribution % 72,5 of rate men, % 27,5 of rate have been fixed to women. (X2.05(1) = 24,300; P<0,000) The athletes who participating in questionnaire analysis of the educational status % 52,5 of rate university, % 42,5 of rate high school, % 4,2 of rate master's degree, , % 0,8 of rate have been fixed to primary school. (X2.05(3) = 99,867; P<0,000).

<sup>&</sup>lt;sup>1</sup> Selçuk University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Selçuk University Faculty of Veterinary Medicine Department of Food Hygiene and Technology

<sup>&</sup>lt;sup>1</sup> Akdeniz University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Dumlupınar University School of Physical Education and Sports

As are sult It has been fixed that most directing doping to athletes are friends (n:84, 70 %) and trainers (n:78, 65 %). The experimentals have emphasized why prefered doping using in sport. These are to gain high performance, eliminate the fear of losing, excessive desire gaining, attractive financial encouragements, provide social status, maintain this status, have been fixed to achieve a good standard of living. According to the results obtained in this study, our recommendations; Athletes, coaches and administrators should be given seminars on ergogenic aids and doping. The materials and methods used, which was published by WADA Doping List, which can not take place should be checked in. Awareness campaigns organizations often must be made to clubs by health care providers and have an active doctor at each club must be provided. Government must have an effective policy on doping.

**Keywords: Doping** 

### PP. 77 AVERAGE BODY HEIGHT OF ADOLESCENTS IN MONTENEGRO

Stevo Popovic<sup>1</sup>, Dusko Bjelica<sup>1</sup>, Rasid Hadzic<sup>1</sup>

<sup>1</sup> University of Montenegro Faculty For Sport and Physical Education

#### **Abstract**

**Introduction:** It is well known in scientific literature that the measurement of body height is important in many settings: it is an important measure of body size and gives an assessment of nutritional status, as well as an important measure of determination of basic energy requirements, standardisation of measures of physical capacity and adjusting drug dosage, and evaluation of children's growth, prediction and standardisation of physiological variables such as lung volumes, muscle strength, glomerular filtration and metabolic rate etc. The unusual height of Montenegrin inhabitants has been recognized by European anthropologists more than 100 years ago. A sample of 800 Montenegrin men measured by Robert W. Ehrich at the beginning of the 20th century gave the highest average in all of Europe (177 cm), with some districts approaching 178 centimetres. Furthermore, a more recent study conducted on student population in Montenegro showed that both sexes of Montenegrin students are very tall and come a close second to adolescents in Holland. Thus, this study has challenged many scientists to believe that Montenegrins are still the tallest population in Europe. However, the problem is that, unlike most other countries, Montenegro keeps poor records and this assumption could not be proven thus far. In light of rather sparse recent scientific literature, the purpose of this research study was to contributes to an update of average heights among both sexes of Montenegrin adolescents.

**Methods:** Our investigation analyses 703 men (aged 18.57±0.54) and 824 women (aged 18.47±0.57). The anthropometric measurements were taken according to the protocol of the International Society for the Advancement of Kinanthropometry (ISAK). The body height is the perpendicular distance between the top of the head (the vertex) and the bottom of the feet. It was measured using stadiometer to the nearest 0.1 centimetres in bare feet with the participants standing upright against the stadiometer. The analysis was carried out using Statistical Package for Social Sciences (SPSS) version 20.0. Means and standard deviations were obtained.

**Results:** A summary of the anthropometric measurements in both sexesis proved that Montenegrins are very tall with an average of 183.74 (male) and 169.48 centimetres (female).

Conclusions: Although there was some hypothesis that Montenegrin males are the tallest male population in all of Europe, which has not been proved yet because of poor records, this study contributes to a very important update of average body heights among Montenegrin males and females. Comparing the results with other studies has shown that both sexes of Montenegrins make Montenegro the second tallest nation in the world. With an average height of 183.74 centimetres, male Montenegrins are very close to the tallest nation in the world, male Dutch (183.8 cm on average). On the other hand, female Montenegrins are 169.48 centimetres tall and also come a close second to girls in Holland (170.7 cm on average). However, there is a hypothesis that both sexes of Montenegrins did not reach their full genetic potential yet, since they have been influenced by various environmental factors (wars, poor economic situation, etc.) in recent decades. Therefore, the authors believe that

these circumstances had a negative bearing on the secular trend in Montenegro, while it is expected that the secular changes affecting height will go up in the following 20 years, comparable to developed countries where this trend has already stopped.

Keywords: Standing Height, Stature, Montenegro

# PP. 116 THE GOAL OF THIS RESEARCH IS TO INVESTIGATE EATING HABITS OF THE STUDENTS AT THE SCHOOL OF PHYSICAL EDUCATION AND SPORT OF BALIKESIR UNIVERSTY

Erdil Durukan<sup>1</sup>, İlyas Özen <sup>1</sup>

#### Abstract

The goal of this research is to investigate eating habits of the students at the school of physical education and sport of Balıkesir Universty, to determine whether they have proper knowledge and consiosness of a sportman diet and to find out the extent to which they apply this knowledge in their daily life.

Our study involved 221 students (143 male, 78 female) of Balıkesir University the school of physical education and sport. The data collected is statistically analised by using SPSS 20.0 to extract avarage kuruksal gamma, crammer v, freguence and percentages, and to apply test.

The researc shoved that %80.5 (178) males, %19.5 (43) females engaje in active sport. However %67.0 (148) reported that they do not pay attention to their diet. The correlation between knowing how to diet and carefull dieting was foun significant at p<0.05 level. It was foun that the majority of particapants had inadeguate diets during tranind and contests.

**Keywords: Active Sports, Eating Habits, Physical Education** 

# PP. 135 AN EXAMINATION OF NUTRITIONAL HABITS OF STUDENTS STUDYING AT DIFFERENT DEPARTMENTS OF ONDOKUZ MAYIS UNIVERSITY

Egemen Ermiş $^{1}$ , Erol Doğan  $^{1}$ , Necati Alp Erilli $^{2}$ , Arif Satıcı  $^{1}$ 

### **Abstract**

This study was conducted to determine the nutritional knowledge and habits of students studying at Ondokuz Mayıs University. A total of 1105 students studying at different departments of Ondokuz Mayıs University during the Academic Year 2013-2014 participated in the study voluntarily. The data was collected through socio-demographic information about the students and personal information forms that included nutritional habits of students. The data collected was analyzed through SPSS.20 statistical package program. For the analysis of data, descriptive statistics and paired comparisons were used. The students were first grouped into two as the students studying at departments related with dieting (for exp. nutrition and diet) and the students studying at other departments and the differences between these two groups were analyzed. The results showed that there was a statistically significant difference between the two groups in terms of doing regular sports (p>0,05) and smoking (p>0,05) while there was no statistically significant difference between the two groups in terms of the questions "are you educated in nutrition?" (p<0,05) and "do you believe in a healthy diet?" (p<0,05). The students were then divided into two as the students studying at departments related with health (for exp. medicine, nutrition, veterinary science, pharmacy) and the students studying at other

<sup>&</sup>lt;sup>1</sup> Balıkesir University School of Physical Education and Sports

<sup>&</sup>lt;sup>1</sup> Ondokuz Mayıs University Yaşar Doğu Faculty of Sport Sciences

<sup>&</sup>lt;sup>2</sup> Cumhuriyet University Faculty of Economics and Administrative Sciences Department of Econometrics

departments. The results showed a statistically significant difference between the two groups in terms of doing regular sports (p>0.05) and smoking (p>0.05) and also the questions "are you educated in nutrition?" (p<0.05) and "do you believe in a healthy diet?" (p<0.05).

**Keywords: Diet, Sport, Health** 

# PP. 155 EVALUATION OF THE NUTRITION KNOWLEDGE LEVEL OF PHYSICAL EDUCATION AND SPORT DEPARTMENT STUDENTS

Mendane Saka <sup>1</sup>, Esra Köseler <sup>1</sup>, Sinem Metin <sup>1</sup>, <u>Aytekin Hamdi Başkan</u> <sup>2</sup>

#### Abstract

**Objective:** The aim of this study was to evaluate the nutrition practices of students who are studying physical education and sport department.

**Methods:** The study was conducted on 89 voluntary students (64 male, 25 female) aged 18-33 (mean 22.1±2.18) years. The questionnaire used in the study included 52 questions about demographic characteristics, general nutrition knowledge, practices and it was administered to students by face to face method. Body weight and height of the participants were measured and Body Mass Index (BMI) was calculated. BMI was evaluated by World Health Organization (WHO) standards. All data was evaluated by SPSS 16.0 for Windows.

**Results:** The mean BMI of the male and female participants were 23.4±1.74 kg/m2 and 20.8±1.93 kg/m<sup>2</sup>, respectively. The 82.8% of the male participants were normal, 17.2% of them were overweight and the 20.0% of the female participants were underweight, 80.0% of them were normal. The 57.3 of the participants stated to be interested in sports as amateur and 10.1% of them as Professional. The 89.8% of the participants defined their nutrition knowledge as "good". When dietary carbohydrates, protein and fat content of some nutrients questioned, the students stated that dairy (83.1%) and meat (85.4%) products mainly contain protein; cereals (94.4%), vegetables and fruits (59.6%) mostly carbohydrates and nuts (67.4%) mostly fat. The students expressed that the vegetables and fruits (82%) should be consumed more; the foods containing sugar (80.9%), starch (66.3%), fat (78.7%) and salt (59.6%) should be consumed. The students indicated that the amount of vegetables and fruits to be consumed daily must be approximately a portion of 2.2±0.89. When the students were asked what alternatives could be for the red meat, the 58.4 percent of the students replied as giblets. The 71 percent of the participants of this study indicated that the yogurt was an alternative for the milk and the 92.1 percent also indicated that the fruit desserts were healtier than the pastry desserts and different types of cakes. The majority of the students (80.9%) expressed that the whole wheat bread contained more vitamins and minerals compared to the other types of bread.

**Conclusion:** Nutrition should considered to be one of the major subject of sports science since it affects both overall health and performance of the athlete. Success in sports is associated with various conditions. The most important of these conditions is undoubtedly conscious eating. Through this study, nutrients and their affects on sports should take place in detail of the education of the athletes in our country.

**Keywords: Sports Nutrition** 

<sup>&</sup>lt;sup>1</sup> Başkent University Faculty of Health Sciences Department of Nutrition and Dietetics

<sup>&</sup>lt;sup>2</sup> Gazi University Institute of Health Sciences Department of Physical Education and Sports

# PP. 157 MEASUREMENT OF KNOWLEDGE ABOUT DOPING OF STUDENTS WHO ARE STUDYING AT SCHOOL OF PHYSICAL EDUCATION AND SPORTS

Tahir Kılıç<sup>1</sup>, Mert Çaphan <sup>1</sup>

<sup>1</sup> Akdeniz University School of Physical Education and Sports

#### Abstract

Doping and fight against with doping are very important topics and they are taking more priority in today's professional sport. At the present time, doping is not an issue only for professional sport, it is also a problem for athletes who practice sport as a free time activity or amateurs who are competitor in a lower performance level

In this research, information about doping of students who are studying at Akdeniz University, School of Physical Education and Sports have been aimed to investigate. For this purpose, a questionnaire form which consisting of 38 questions have been applied to individuals. This research has been made with the participation of 331 students in total; 140 students from The Physical Education and Sport Teacher program, 88 students from Sport Management program, 103 students from Coaching Education program.

Statistical analysis of this research has been made with the *Microsoft Office 2007* at the first step, then has been used *SPSS 15 Packet Program*.

According to the results obtained from the study, it has been seen that the most of students have sufficient knowledge on an athlete's responsibilities. For example; %70 of students have knowledge on that they should not use drugs on recommendation without knowing ingredient. It has been seen that the 93% of students are be aware of that an athlete should take responsibilities of drugs that he or she swallowed or inject his or her body.

About the doping control; it has been seen that students who attend this research knows if an athlete has concern about process of doping control, he or she should express these concerns during the checking of doping. It has been seen that the students who attend this research has not enough knowledge about that additionally blood sample can not be taken if they fail to provide adequate urine sample(%20,5).

About prohibited conditions, %74 of students have knowledge about prohibited conditions. In this part, %36 of students have not enough knowledge about common side effect fo Human Growth Hormone (hGH).

About implementation of the rules, %40 of students know the purpose of World Anti-Doping Code.

**Keywords: Doping, Doping Control, Prohibited Conditions** 

# PP. 173 WEIGHT ESTIMATION FROM LEFT FOOT DIMENSIONS OF WEST ANATOLIAN ELITE YOUNG MALE FOOTBALL PLAYERS A PRELIMINARY STUDY

# Aksel Çelik<sup>1</sup>

### Abstract

**Objectives:** The purpose of this study was to examine the relationship between left foot length, foot width and weight.

**Materials and Methods:** The study involved 20 West Anatolian Elit Young Male Football players mean age was  $20.67 \pm 1.11$  comparing with 20 age and gender matched control subjects  $20.40 \pm 1.40$ . Elit young male football players average body weight was  $82,63 \pm 6,40$  and Control group average body weight was  $83.60 \pm 10.68$ . Control subjects were selected from the sedentary subjects without sport activities and healthy people.

All the measurements were taken by the same researcher at the same time of the day and reported to the nearest millimeter. All subjects were free from any apparent foot deformity.

To get the foot measurement of the subjects were determined by using a digital caliper (Mitutoyo,

<sup>&</sup>lt;sup>1</sup> Dokuz Eylül University School of Sport Sciences and Technology

Japan). In addition, the footprints (length and width) and footwear (length and breadth) of the same subjects were measured. Length and width of food measurements is that Calc Width: measurement across the widest section of the heel print (calcaneum). MPJ Width: measurement across the widest part of the forefoot print (across the metatarsophalangeal joints). Pearson's coefficient of correlation from package SPSS 15.0 was used for data processing.

**Results:** Average foot length of Elit Young Male Football players is  $261,64 \pm 14,53$ , Control group average foot length was  $265.29 \pm 13.47$ . Elit young male football players average foot width of was  $103,75 \pm 7,04$  mm, Control group average foot width was  $97.08 \pm 6.27$  mm.

We also evaluated that correlation between weight and left food measurement of West Anatolian Elite Young Male Football players comparing with control subjects.

**Conclusion:** Whenever feet measurement and weight are estimated, it is suggested that the discriminant data could provide useful clues to establish personal identity of the athlets.

Keywords: Elite Male Football Player, Left Food, Food Length, Food Width

# PP. 176 THE PREVALENCE OF OBESITY IN WOMEN WHO ATTEND SPORTS CENTERS WITH THE EXAMINATION OF HEALTHY LIFESTYLE BEHAVIORS

Talha Murathan <sup>1</sup>, Ümit Yetiş <sup>2</sup>, Fatih Murathan <sup>2</sup>, Metin Karayol <sup>1</sup>, Kübra Özdemir <sup>1</sup>

- <sup>1</sup> Ardahan University School of Physical Education and Sports
- <sup>2</sup> Adıyaman University School of Physical Education and Sports

#### **Abstract**

The prevalence of obesity and diseases caused all over the world due to, especially in developed countries are considered as a problem of epidemic, is regarded as a disease in itself even. The problem is beyond the state of individual quality of life and health, due to the high costs of treatment has gained a considerable size. Nevertheless according to the World Health Organization estimates that %70-80 of deaths in developed countries, in developing countries cause %40-50 of deaths, depending on the emerging lifestyle diseases. This disease in the development of one's own attitudes and behaviors have an important role. In the case studies, half of the diseases that cause death plays the role of health damaging behaviors was observed. Women who attend fitness centers To determine the prevalence of obesity and healthy lifestyles in order to examine the behavior of the universe of this research conducted in the province of Adiyaman consists of women who attend fitness centers. 244 women participated in the survey is voluntary. SPSS statistical package program was used for statistical analysis of research data 17.00. Analysis of data, women who participated in the survey 27.86% (68 people) fat, 31.55% (77 people) are slightly overweight, 40.59% (99 people) were found to be normal weighing. However, the surveyed women Healthy Lifestyle Behaviors Scale subscales of the points they got the highest average nutritional habits ( $36.42 \pm 5.42$ ) and self-realization ( $28.11 \pm 6.58$ ) subscales significant differences were found (p <0, 05). Results of the study family, school, health staff and community hand in hand with increasingly become a public health problem that should create awareness against obesity. Do not forget that preventable cause of death among obesity ranks second after smoking. Measures should be monitored for weight gain in every period of life, and should be kept under control, however, must be supported healthy lifestyle.

Keywords: Obesity, Sports Centers, Healthy Lifestyle

# PP. 193 EVALUATION OF NUTRITIONAL KNOWLEDGE AND HABITS OF FEMALE HANDBALL PLAYERS

<u>Şule Kırbaş</u><sup>1</sup>, Sedef Kurt <sup>2</sup>

### **Abstract**

**Aim:** This study was carried on to evaluate the nutritional habits and knowledge of female handballers and to contribute to athletes and coaches on this subject.

**Method:** The sample of the study consists of 168 athletes playing in I. league A group. Each athlete was tried to reach related to the volounteerly but only 80 of them answered the questionaire. The average age interval of the participants was 15-32 years, their education status was that 12 of them were secondary school, 53 of them were high school and 15 of them were university graduates. A questionaire was given to them to evaluate their nutritional knowledge and habits. The questionaire was given to them at fitting rooms before the game with the approval of their coaches. The obtained data was evaluated by determining the frequency percentage.

**Findings:** It was seen that %37.5 of them took training at most 3 days in a week, % 32.5 of them 6 hours and %71.3 of them joined training 2 hours a day. % 20 of them declared that they had smoking habit and %2.5 gave up smoking. % 62.5 of the athletes said that they had three regular meals a day. % 90 of them had regular breakfast, %85 had lunch and %88.8 had dinner. %53.8 consumed fruit and %33.8 had nuts. In the study, %27.5 of the female handball players sometimes took vitamins, %13 took vitamins regularly and %7.5 of them took protein powder sometimes and %7.5 of them took it just before the game. In the study it was also found out that %71.3 of the athletes did not have a habit of drinking energy drinks whereas %65 of them had sports drink in different time intervals. %7.5 of them told that they used other ergojenic materials. It was determined that %47.5 of them finished eating three hours before the game and %70 of them consumed water or mineral water an hour before the game. %91.3 consumed water either during the game or in the half time. %30 of the female players did nothing extra for recovery and %27.5 prefered to sleep after the game.

The result: As a result, it can be said that the athletes who participated in the study acquired positive habit about nutrition knowledge and habit. However, it is crucial for the athletes to stay away from the bad habits to increase the sportive success and it is necessary to be careful about to use nutritional and ergonejic materials for the team success. It is recommended to the clubs to hold regular seminars for the athletes and trainers about the awareness of the nutrition and habit and to work with an expert about nutrition plan related to the training season and type.

Keywords: Female Handball Players, Eating Habits, Nutrition Knowledge

# PP. 222 THE ASSESSMENT OF THE DIETARY SUPPLEMENT USE OF INDIVIDUALS GOING TO FITNESS CENTER

Neşe Toktaş Torun<sup>1</sup>, Ali Akkuş <sup>1</sup>

#### Abstract

Purpose: The purpose of this study was to determine dietary supplement use by individuals who exercise for the recreation in Antalya centrum. Method: The study was conducted on 63 female and 87 male, in total 150 volunteers. Individuals were administered a questionnaire form containing information of health, sport and dietary supplement use. Results: The age, height and weight of the female were measured as  $29,20 \pm 1,31$  year,  $166,0 \pm 0,01$ cm,  $61,62 \pm 1,44$  kg respectively (mean  $\pm$  SD)

<sup>&</sup>lt;sup>1</sup> Amasya University Faculty of Education Department of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Niğde University School of Physical Education and Sports

Akdeniz University School of Physical Education and Sports

and their body mass index was calculated as 22,25±0,49 kg/m<sup>2</sup>. The age, height and weight of the male were measured as  $26.50 \pm 0.81$  year,  $178.0 \pm 0.01$  cm,  $76.48 \pm 1.09$  kg respectively (mean  $\pm$  SD) and their body mass index was calculated as 24,10±0,28 kg/m<sup>2</sup>. 71,3 % of individuals were postgraduate. 22 % of individuals have used dietary supplement. The purpose of individuals using dietary supplement was to increase muscle mass and strength. The commonly used product was protein and after was fat burner. Dietary supplement have been recommended by coaches for % 87,9 of individuals. % 42,4 of individuals have purchased dietary supplement from fitness center, % 33,3 of individuals, from sport nutrition store, % 15,2 of individuals, from internet. Weak individuals didn't use dietary supplement. % 20,2 of individuals with normal weight, % 25,8 of overweight individuals and % 66,7 of obese individuals have used dietary supplement. There is the statistically significant difference on dietary supplement use between female and male. Dietary supplement use was more prevalent among male (p<0.05). Conclusion: Dietary supplement use is increasing for healthy life, increased muscle mass and strength among athletes and individuals who exercise for a healthy life. Coaches have a great influence on dietary supplement use. Coaches should be trained. Dietary supplement use is very important issue. Controlling should be made regarding the sale of products and dietary supplements should be proposed by those skilled.

Keywords: Healthy Life, Exercise, Dietary Supplement

# PP. 230 DETERMINING OF THE NUTRITIONAL KNOWLEDGE LEVEL OF THE PROFESSIONAL YOUTH FOOTBALL PLAYERS

Beril Yılmaz<sup>1</sup>, Hazel Doğan <sup>1</sup>

#### **Abstract**

**AIM:** The purpose of this study is determine the eating habits and the nutritional knowledge and the necessity about sports nutrition of the professional youth players in Ankara.

**METHOD:** 72 male subjects who were selected randomly from the professional youth football players in 2013-2014 football season were included in the study. A questionnaire consisting of 57 questions about the demographic characteristics, the nutrition knowledge, the source of the nutrition knowledge, the eating habits and the level of nutrition knowledge of the individuals participating in the study was applied by using face-to-face survey technique. The questinonnaire consisting of 30 question for determining the level of the nutrition knowledge and every question was scored 1 point. After the statistical analyses, players' nutritional knowledge scores evaluated in two groups under and above the mean score, respectively. Players who had a score under the mean score had insufficient knowledge and the others who had a score above the mean score had sufficient knowledge about sports nutrition. SPSS Windows 16.0 was used for data analysis. The statistical significance was p<0.05.

**RESULTS:** The mean age of the 72 athletes were  $15.44 \pm 1.11$  years. The 26.4% of them played in U-14, 25% of them played in U-15, 26.4% of them played in U-16 and 22.2% of them in U-17. When the athletes were examined about general nutrition habits, 56.8% of them stated that they consume main meals regulary. The 29.2% of the youth players had one snack, the 51.4% of them two snack, the 16.7% of them had three and the 2.8% of them had four snack daily. When the athletes were asked about snack preference, 70.8% of them answered fruits, 35.6% of them answered cake and bisquits, 47.2% of them answered chocolate, 44.4% of them answered bread and pastry, 43.1% of them answered nuts. The 86.1% of the players drank water during training. The percentage of the athletes who had nutrition education was 36.1%. Athletes who had an education about nutrition, stated that they had this education 54.2% from self-education, 22.2% from trainer, 9.7% from doctor, 9.7% from dietitian and 4.2% from internet. The mean score of the nutritional knowledge level of the players was  $18.0\pm2.84$  out of 30. Nutritional knowledge scores of the U-14, U-15, U-16 and U-17 player groups were not different statistically (p>0.05). The 53 of the all players' nutrition knowledge level were under the mean score.

<sup>&</sup>lt;sup>1</sup> Baskent University Faculty of Health Sciences Department of Nutrition and Dietetics

**CONCLUSION:** The mean nutritional knowledge score of the four different groups of players were similar. As a result, youth players should be trained about sports nutrition.

Keywords: Sports Nutrition, Nutrition, Knowledge Level

# PP. 237 THE EFFECTS OF THE HABIT OF DOING EXERCISE ON JOB SATISFACTION AND PHYSICAL FITNESS PARAMETERS OF CIVIL SERVANTS, WHO IRREGULARLY OR NEVER DO EXERCISE

Fatih Sarıkaya <sup>1</sup>, <u>Birgül Arslanoğlu</u><sup>2</sup>

#### Abstract

Aim is in this study, the relationship between the average values of physical fitness parameters of civil servants with irregular or or never do exercise, working in Istanbul Technical University, and Minnessota job satisfaction survey, Intrinsic Satisfaction, External Satisfaction and Overall Satisfaction levels are examined.

The working group consisted of two twenty civil servant sub-groups, with a) irregular exercise and b) never do exercise, at the age interval of 30-45. To both groups were measured body mass index (BMI) (kg/m²), sit-reach (cm) and shuttle-run test. Additionally, the Minnessota job satisfaction survey was applied to these groups. SPSS 21.0 statistical analysis software was used in the evaluation of the results. The data obtained from the tests were analyzed, in SPSS 21.0, with Descriptive Statistics analysis method was used to determine the maximum-minimum values, average values and standard deviations, and the job satisfaction levels between two groups were evaluated with Independent Samples T Test method.

After the study, it was found that there were significant differences between irregularly exercise and never do exercise groups in terms of Body Mass Index average values and MaxVO $_2$  (mL kg min $^{-1}$ ) average values. Besides, people with irregular exercise had a general job satisfaction greater than those with never do exercise and a relationship with (p < 0.05) meaningfulness level was found between two groups.

Based on these results, it is found that urging towards doing exercises in governmental sector is important for occupational happiness of civil servants.

Keywords: BMI, Physical Fitness, Max VO2, Job Satisfaction

# PP. 249 THE EFFECT OF QUALITY OF LIVE LEVEL IS PHYSICAL EDUCATION AND SPORTS STUDENTS WITH OTHER DEPARTMENTS OF THE UNIVERSITY STUDENTS IN ELECTIVE COURSES

Ozan Yılmaz<sup>1</sup>, Enis Çolak <sup>1</sup>, Betül Bayazıt <sup>1</sup>, Serap Çolak <sup>1</sup>, Hakan Akdeniz <sup>1</sup>

### **Abstract**

**Objectives:** Quality of live is a situation feeling happy of oneself which is including physical, mental, social, emotional, incorporeal, environmental and occupational health facet. The purpose of this study was to investigate the effect of life quality of students between who are studying in other faculties and taking elective course from School of Physical Education and Sports and who are studying School of Physical Education and Sports and taking elective course from other faculties in new structural upgrade in University of Kocaeli.

<sup>&</sup>lt;sup>1</sup> Istanbul Technical University Physical Education

<sup>&</sup>lt;sup>2</sup> Istanbul Technical University Humanities and Social Sciences

<sup>&</sup>lt;sup>1</sup> Kocaeli University School of Physical Education and Sports

**Methods:** 200 Students (Male: 108, Famale:92) participated in this study. The Physical Education and Sports students group consisted of 100 (mean age:22.04±2.04) and the other students group consisted of 100 (mean age:21.44±1.91) student of university. It's limited to total 200 students in who are selecting opened elective courses Outdoor Sports, Orienteering, Badminton, Chess and Tennis in 2013 – 2014 educational year of University of Kocaeli - School of Physical Education and Sports in Spring Term and School students. World Health Organisation development and verified and translated to Turkish by Eser and Friends (1999) Quality of Life Instrument (WHOQOL-BREF-TR) had been used for data collection. Data had been analyzed by SPSS 17.0

**Results:** Results after analyzing the quality of life of students who are studying in other faculties and taking elective course from School of Physical Education and Sports and students who are studying in School of Physical Education and Sports showing that there are significant differences in regards quality of life, environmental sub-dimension and genders.

**Conclusions:** Woman who are selected sport lessons increasing self-confidence with their physical activities to see that finding diversity in gender. This situation promote their quality of live. We believe that students might be happier by physical activities which way take on such like these optional subjects. This is a fact that periodically sport activities influence quality of life and other psychological variant which people joined regular sport activities. For this reason, it is necessary that university students are induced such as these activities with out their lessons.

Keywords: Quality of Life, Physical Education and Sports, Student

## PP. 261 THE EVALUATION OF PHYSICAL FITNES IN 8-10 AGED CHILDREN BY EUROFIT TEST BATTERY: CASE STUDY OF ANTALYA-KEPEZ PROVIENCE

Neşe Toktaş Torun<sup>1</sup>, Rıza Darendelioğlu <sup>1</sup>, Funda Seferoğlu <sup>1</sup>

### **Abstract**

**The Purpose:** the purpose of the study, provide the participation of 8-10 aged children to the sport by evaluation of their physical fitness and also, bring in the new norm data to literature by reach a wide audience.

**Methods:** 9,13±0,47 aged 540 boy and 475 girls totally 1015 children who are students of 3<sup>rd</sup> grade in schools in Antalya-Kepez province participate to the study. Euro-fit test battery applied to the individuals for evaluates their physical fitness.

**Results:** The individuals' results of anthropometric parameters of Euro-fit test battery; height; 131,44±5,71 cm, weight; 29,27±6,4. Results of the other parameters of test battery; Flamingo balance; 10,12±3,92, plate tapping; 152,55±22,24, sit and reach; 26,82±5,67cm, standing broad jump; 105,58±17,54cm, hand grip; 12,10±3,03, sit-ups; 13,20±5,68, 10\*5 shuttle run; 22,28±2,58sn, 30m sprint; 6,77±0,85sn.

**Conclusion:** As a result of this study, the feedback about their physical fitness levels and supporting to their participation to the sport was given to over than 1000 children who participating in this study. And also, data entry to the literature was provided.

Keywords: Physical Fitness, Eurofit, Children

<sup>&</sup>lt;sup>1</sup> Akdeniz University School of Physical Education and Sports

## PP. 265 RELATIONSHIP BETWEEN FREQUENCY OF PHYSICAL ACTIVITY AND ABDOMINAL VISCERAL FAT IN CHILDREN

### Abstract

**Introduction:** Measurement of visceral adipose tissue (VAT) by DXA combined with anthropometry is a technique useful as good indicator of central adiposity in studies designed to assess changes in visceral adiposity<sup>1</sup>. Changes in central adiposity can occur in response to physical activity (PA)<sup>2</sup>. Long term PA engagement is important for maintaining or reducing VAT<sup>3</sup>.

**Objective:** To explore the association of abdominal fat measured by DXA and anthropometry and frequency of PA in children.

**Methods:** Forty-one (n=24 boys, n=17 girls) healthy children (age 11.4±0.6 years, BMI 20.1±3.9 Kg/m<sup>2</sup>) were volunteers. Adiposity was assessed by anthropometric measurements in accordance with ISAK guidelines. Total body and segmental tissue composition, and new parameters obtained from DXA. The abdominal region delineated by an upper horizontal border located at half of the distance between acromions and external end of iliac crests, a lower border determined by the external end of iliac crests and laterally to any trunk soft tissue. A Total PA score was estimated by Physical Activity Questionnaire (PAQ-C). The predominance of PA (strength or aerobic) were calculated through the first item of the questionnaire.

**Results:** There were no significant associations between frequency of PA and VAT (r=-0.084). There were no significant differences in body composition between type of PA performed, except significant associations between PA and triceps skinfold for strength group (r=-0.474, P<0.05).

**Conclusion:** Our data no confirm the relationship between frequency of PA and VAT. Other studies have reported that the volume of PA does not appear to influence the VAT. Therefore, the results suggest that the intensity of PA may be an important factor. Further prospective studies using accelerometry or larger samples must be need.

Keywords: Childhood, DXA, Anthropometry, PAQ, Visceral Fat

## PP. 289 RETURN TO PLAY PROCESS OF A SOCCER PLAYER DIAGNOSED WITH MALIGNANT PERIPHERAL NERVE SHEATH TUMOR

Hilmi Mustafa Demir <sup>1</sup>, <u>Sabriye Ercan</u> <sup>1</sup>, Cem Çetin <sup>1</sup>

#### Abstract

Malignant peripheral nerve sheath tumors accounts (MPNST) for 10% of soft tissue sarcomas. About half of these tumors occurs de-novo. Main treatment for MPNST's are radical and complete surgical excision with adjuvant radiotherapy or chemotherapy.

In this case, we observe post operative rehabilitation process of a professional soccer player with vastus medialis muscle resection and local chemotherapy treatment.

17 year old male soccer player was admitted to our Sports Medicine Clinic, with the complaints of limited range of motion for left knee and muscle weakness at the same side.

On the anterolateral aspect of the thigh, there was an 15 cm length scar tissue was inspected. On the same area there was a tissue defect due to vastus medialis resection. Circumference around the patella was 36 cm on left side and 37 cm on the right side; 5 cm above the patella circumference of the left thigh was 34 cm and at the same level at right side circumference was 39 cm. Range of Motion (ROM)

<sup>&</sup>lt;sup>1</sup> University of Málaga Faculty of Educational Sciences

<sup>&</sup>lt;sup>2</sup> University of Málaga Faculty of Medicine

<sup>&</sup>lt;sup>1</sup> Süleyman Demirel University Faculty of Medicine Department of Sports Medicine

limits for active knee flexions were 75 degree and 125 degree on left and right knee's respectively, ROM limits for passive knee flexions were 80 degree and 135 degree on left and right knee's respectively. There was an 62% muscle strength deficit on left side knee extensors during isokinetic testing.(Right knee PT (@60°/sec):164, IPT (@240°/sec):104, TWD (@240°/sec):1475; left knee PT (@60°/sec):62, IPT (@240°/sec):46, TWD (@240°/sec):536).

Patient was enrolled to rehabilitation program for gaining range of motion and muscle strength to go back for return to play.

Treatment consists of range of motion exercises, strength training exercises for quadriceps muscle (which also includes isokinetic trainings) and proprioceptive trainings. First 6 weeks of treatments were accompanied by sports physiotherapists, under the sports physicians supervision, and then patient was allowed for home rehabilitation protocol.

At the end of 1 year treatment, circumference around the patella was 38 cm on left side and 39 cm on the right side; 5 cm above the patella, circumference of the left thigh is 36.5 cm and at the same level at right side circumference was 41 cm. ROM limits for active knee flexions were 130 degree and 140 degree on left and right knee's respectively. ROM limits for passive knee flexions were 132 degree and 140 degree on left and right knee's respectively. Both side knee extensor strength was at normal levels at the end of 1 year. [Right knee PT (@60°/sec): 210, IPT (@240°/sec): 140, TWD (@240°/sec): 1995;left knee PT (@60°/sec): 185, IPT (@240°/sec): 110, TWD (@240°/sec): 1629 ]. Patient has returned to play with his teammates and played in soccer games after the 6th months of treatments.

Even though muscle resection due to malignancies, with a successful rehabilitation progress athletes can return to play successfully. Like all injuries, early rehabilitation after this kind surgical procederus will make return to play earlier.

Keywords: Malignant Peripheral Nerve Sheath Tumor.post-Operative Rehabilitation, Isokinetic

## PP. 297 THE EFFECTS OF BODY WEIGHT REDUCTION WITH 4 AND 8 WEEKS OF PHYSICAL ACTIVITY PROGRAM APPLIED

 $\underline{\text{G\"{u}lsen Tosun Tunc}}^1$ , Hacer Yıldız  $^2$ , Melih Nuri Salman  $^1$ 

#### **Abstract**

Today, the comfort that technological advances bring along with inactivity which is a direct result of office work life cause the body fat ratio to grow and leads to increased body weight. It is a known fact that in order to avoid this situation, one has to engage in regular physical activity and has to comply with healthy dietary principles.

**Aim:** The aim of this research is to deliver a physical activity program which allows entire body to work out and also to enable individuals to reduce their daily calorie intake in order to achieve their optimal basal metabolic rate.

**Method:** From 130 voluntary female participants who were all subscribed to a private gym, a certain portion were selected (by their own requests) to undergo a 4 week program while another portion were selected for an 8 week program. All members underwent a physical activity program in which they burn an average of 480 kcal in per 1 hour, 3 days a week. The program is employed in a way that participants' heartbeat per minute is between 132 - 136 bpm. After 4 weeks, participants who choose to continue the physical activity were given the same program with different moves. All participants' body analyses were conducted at the start of the program and after the end of each 4 week period by using TANITA BC 418 device. Participants whose daily calorie intake according to their basal metabolic rate are 1500 kcal or more were asked to reduce their intake by 300 kcal while participants whose daily calorie intake are below 1500 kcal value were asked to reduce their intake by 200 kcal. All participants were asked to adjust their diet according to above requests.

**Findings:** 55 out of 130 participants (42.3%) were employed in various professions while 45 participants (34.6%) were students and 30 participants (23.1%) were housewives. Participants' ages is

<sup>&</sup>lt;sup>1</sup> Aksaray University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Selçuk University School of Physical Education and Sports

 $(X=29.3\pm8.3)$ , their height is  $(X=164.3\pm5.4)$ , BMI (Body Mass Index) is  $(X=27.8\pm4.6)$  and BMR kcal (Basal Metabolism Rate) is  $(X=1495.3\pm208.0 \text{ kcal})$ . Average body weight loss according to body analysis conducted at the beginning of physical activity program and the second analysis conducted after 4 weeks is  $(X=3.4\pm3.3 \text{ kg})$  and average body weight loss after 8 weeks is  $(X=5.3\pm2.6 \text{ kg})$ . Average body weight loss according to body analysis conducted at the beginning of physical activity program and the second analysis conducted after 4 weeks is  $(X=3.4\pm2.1 \text{ kg})$  and average body weight loss after 8 weeks is  $(X=5.3\pm2.6 \text{ kg})$ . Average body fat loss (in kilograms) according to body analysis conducted at the beginning of physical activity program and the second analysis conducted after 4 weeks is  $(X=2.8\pm2.1 \text{ kg})$  and average body fat loss after 8 weeks is  $(X=4.4\pm3.1 \text{ kg})$ .

**Conclusion:** As a result of this research, 4 and 8 week physical programs enable individuals to lower their calorie intake according to their basal metabolism rates, which in turn causes body fat mass to reduce and results in body weight loss. After all, voluntary women can easily lose body weight as long as they know their basal metabolic rate, adjust their diet accordingly and engage in weekly physical activities in which they burn 480 kcal per hour, 3 days in a week. The program must be employed in a way that participants' heartbeat per minute is between 132 - 136 bpm.

Keywords: Physical Activity, Basal Metabolic Rate, Body Mass

# PP. 300 EXAMINATION OF PHYSICAL ACTIVITY LEVEL IN OFFICE WORKERS ACCORDING TO CARDIOVASCULAR RISK FACTORS (THE AKDENIZ UNIVERSITY HOSPITAL EXAMPLE)

Mükerrem Erdoğan<sup>1</sup>, Zehra Certel<sup>2</sup>, Alpay Güvenç<sup>2</sup>, Anıl Şahin<sup>2</sup>

#### Abstract

**Objective:** The purpose of this study is to examine the level of physical activity in hospital office workers according to cardiovascular risk factors.

**Methods:** The population of this study consisted of office workers (N=454) at Akdeniz University, Faculty of Medicine Hospital. Random sampling from this population included 401 office workers in total, of whom 273 were female and 128 were male workers. The short form of "International Physical Activity Questionnaire" (IPAQ) was used to assess physical activity levels. Physical activity levels were classified as "non-active" (<600 MET - min/week), "low activity" (600 - 3000 MET- min/week), and "sufficient activity" (>3000 MET- min/week). Waist circumference and waist-to-hip ratio were used as indicators of cardiovascular risk factors. Thus, waist circumference between 94-102 cm in men and 80-88 cm in women, and  $\ge 102 \text{ cm}$  in men and  $\ge 88 \text{ cm}$  in women were considered as "increased risk" and "high risk" factors, respectively. Moreover, waist-to-hip ratio > 0.90 and > 0.85 in men and women respectively, were also considered as "risky" for cardiovascular disease. Data were analyzed using the Chi-Square Test.

**Results:** The average weekly energy consumption of office workers was calculated as  $1088.33 \pm 1278.05$  MET- min/week. About 46.9% of the workers turned out to be in the "non-active" group, 46.6% in the "low level physical activity" group, and only 6.5% displayed "sufficient" levels of physical activity. Upon gender comparison, males' physical activity levels were found to be significantly higher than females' ( $\mathbf{X}^2=16.204$ , p<0.05). There were no significant differences between cardiovascular risk factor groups in terms of physical activity levels for each gender groups (p>0.05). **Conclusions:** In general, physical activity levels of office workers were not sufficient, but these levels

Keywords: Cardiovascular Risk Factors, Physical Activity, Office Workers

were not associated with cardiovascular risk factors for this sample of office workers.

<sup>&</sup>lt;sup>1</sup> Akdeniz University Vocational School of Health Sciences

<sup>&</sup>lt;sup>2</sup> Akdeniz University School of Physical Education and Sports

## PP. 327 INVESTIGATION OF INJURY ZONES AND REASONS IN GRECO-ROMAN AND FREESTYLE WRESTLING

## Erdil Durukan<sup>1</sup>

<sup>1</sup> Balıkesir University School of Physical Education and Sports

## **Abstract**

### Goal

The purpose of this thesis is the "Investigation of Injury Zones and Reasons in Greco-Roman and Freestyle Wrestling". The surveys prepared were applied to the above sampling group and the data obtained was used to identify the situation. The importance of the study is in finding common reasons of injuries and helping prevent possible future injuries based on this data.

### **Materials and Methods**

The sampling group of our research is 110 wrestlers of mixed age groups, wrestlers of Kocaeli Metropolitan Municipality Sports Club, Çorum Municipality Wrestling Club and Beşiktaş Sports Club operating in Turkey.

Wrestlers actively wrestling for Kocaeli Metropolitan Municipality Sports Club, Çorum Municipality Wrestling Club and Beşiktaş Sports Club were selected. 16 Greco-Roman and 94 Freestyle wrestlers voluntarily took the survey. SPSS 20.0 was used to statistically analyse data obtained from participating wrestlers. Frequency and percentage values were taken.

### Results

Significant differences were identified between the years of wrestling of the participating wrestlers and their injury zones. Significant differences were also observed in the age categories of little wrestling, junior wrestling and great wrestling. 85.5 % of the wrestlers who took the survey wrestle Free Style and 14.5 % Greco-Roman style. 15.5 % of them receive doctor support, 36.5 % receive masseur support and 2.7 % physiotherapist support at their clubs while it is remarkable that the answer 'None' reached 39.1 %. Today, the rate of doctor and masseur non-availability at a sports club is 60.3 %, whereas the availability rate is 39.7 %. This point has to be considered too; because the availability of masseur and doctor is very important at the time of a possible injury.

Keywords: Greco-Men, Freestyle Wrestling, Mutilation Regions

## PP. 344 BALANCE, MUSCLE STRENGTH AND PERFORMANCE DIFFERENCES BETWEEN NON-OBESE AND OBESE DISLIPIDEMIC PATIENTS'

Sabriye Ercan<sup>1</sup>, Hilmi Mustafa Demir <sup>1</sup>, Cem Çetin <sup>1</sup>

#### **Abstract**

Cardiovascular diseases are one of the most leading chronic diseases. Hyperlipidemia; family history, male gender, diabetes mellitus, hypertension, central obesity and smoking are risc factors for cardiovascular diseases. Increased physical activity and cardiovascular fitness leads to lowering of the mortalities. Patients functional status must be determined for exercise prescription.

Patients with dyslipidemia were enrolled to study. Patients were divided to two groups according to their body mass, as obese and non-obese.

Between May 2012- May 2013, 16 patients who applied to Sports Medicine Clinic of Suleyman Demirel University Research and Education Hospital, with dyslipidemia were enrolled to this study. Patients have no additional diseases. Exercise prescriptons were done by Sports Medicine Physicians. 6 of the patients body mass index were normal (BMI<25) and 10 of the patiets were obese (BMI>30). Pre-exercise tensions were measured all of the patients. Then 15 meter timed get up and go test, Flamingo balance test, Wingate Anaerobic Test (WAnT)(894E Cycle Ergometer)(5% patients' body weight, for 20 second), HUMAC® NORM<sup>TM</sup> Testing & Rehabilitation System was used to evaluate

<sup>&</sup>lt;sup>1</sup> Süleyman Demirel University Faculty of Medicine Department of Sports Medicine

## POSTER PRESENTATIONS SPORT AND HEALTH SCIENCES

isometric muscle strength at 45 degree knee flexion position and isokinetic muscle strength testing (60 degree/sec and 240 degree/sec, concentric/concenteric mode) for knee extensors and flexors. All tests were done for dominant leg.

All informations were analysed by using SPSS 22.0 package software. While defining the data descriptive statistics used and to evaluate if there is a significant difference between obese and non-obese patients' results we used Mann-Whitney U tests. The statistical significance was p <0.05. Results were expressed as mean  $\pm$  standard deviation.

Of the 16 patients, 9 were female and 7 were male. BMI of patients were calculated. 6 of the patients' body mass index were normal (BMI<25) and 10 of the patienst were obese (BMI>30). There is non-obese dyslipidemic 6 patient. 4 of them are female and 2 of them are male; mean age was  $52.3 \pm 13.8$  year; mean weight was  $59.2 \pm 12.2$  kg; mean height was  $163.7 \pm 12.4$  cm and mean BMI was  $22.0 \pm 2.6$ . There were 10 obese dyslipidemic patients in our study. 5 of them were female and the other 5 were male. Mean age was  $58.7 \pm 10.3$  year; mean body weight was  $81.4 \pm 9.3$  kg; mean height was  $155.7 \pm 6.4$  cm and mean BMI was  $33.6 \pm 3.7$ .

Between groups there was no statistically significant differences at Flamingo balance test results, isometric muscle strength extension and flexion Peak Torque(PT), isokinetik PT, Initial Peak Torque (IPT), Total Work Done (TWD) (p>0.05). However 15 meter Get Up and Go Test and WAnT peak power and peak drop results were significantly better at patients with normal BMI.

Aerobic exercise prescriptions and weight control were recommended for dyslipidemic patieints. In this study, alactacid anaerobic performance and drop power of obese hyperlipidemic patients' were statistically significant worse than non-obese hyperlipidemic patients. Obese patients Get up and Go Test results, strength, stance and balance test results were in normal limits, but those results were worse than non-obese patients results.

Exercise prescription for obese dyslipidemic patients should include activities that increasing anaerobic performance and balance performance.

Keywords: Obesity, Dyslipidemi, Exercise Prescription

## PP. 393 THE EFFECT OF BUST HEIGHT ON SOME SELECTED PHYSICAL AND PHYSIOLOGICAL PARAMETERS IN FOOTBALLERS AND SEDENTARIES

Bekir Mendeş<sup>1</sup>, Eda Mendeş<sup>2</sup>, Ayhan Tepe<sup>3</sup>

- <sup>1</sup> Gaziantep University School of Physical Education and Sports
- <sup>2</sup> Ministry of National Education Sevinç Bahattin Secondary School
- <sup>3</sup> Ministry of National Education Cumhuriyet Secondary School

### Abstract

**Aim:** Physical and physiological characteristics are important factors affecting sedentary lifestyle and therefore success in sports. In this study, the relationship of bust height forming structural differences with some physical and physiological characteristics in footballers who regularly practice and sedentaries was investigated.

Materials and Methods: A total of 40 voluntaries, 20 male footballers whose average age was  $19.500 \pm 0.550$  years and 20 male sedentaries whose average age was  $22.000 \pm 0.332$  years, participated to the study. Ages, heights, weights, BMIs (body mass index), bust heights, back and leg strengths, flexibilities, body fat percentages, 30 m sprints,  $VO_2$ max (maximal oxygen consumption capacity) of the groups were measured. T-test for comparison of group means, Pearson Correlation for the characteristics of both groups, Simple Regression Analysis for the estimation of the bust height and Pearson Correlation Analysis for detected features of the groups were used. **Results:** Statistically significant difference was found between two groups with respect to age, flexibility, body fat percentage (%) and  $VO_2$ max. Bust height was significantly affected than the height in both groups (p = 0.000). In the simple regression analysis performed for the estimation of the bust height in

footballers and sedentaries, it was detected that bust height was only affected than the height significantly (P = 0.000). **Conclusion:** It has been concluded that bust height requires being tall in footballers and sedentaries. The selection of footballers from individuals appropriate to this data in selections and studies performed related to footballers is thought to contribute to success in sports.

Keywords: Bust Height, Footballer, Sedentary, Physical and Physiological Characteristics

# PP. 396 COMPARISON OF BODY COMPOSITION PARAMETERS OF STUDENTS IN SCHOOL OF PHYSICAL EDUCATION AND SPORTS ACCORDING TO THEIR BIRTH MONTHS

 $\underline{\text{Ayhan Tepe}}^1$ , Bekir Mendeş $^1$ , Gökhan Doğan $^2$ , Kenan Uzun  $^3$ 

- <sup>1</sup> Gaziantep University School of Physical Education and Sports
- <sup>2</sup> Ministry of National Education İstiklal Secondary School
- <sup>3</sup> Ministry of National Education Mehmet Ünsal Secondary School

#### Abstract

Aim: Nowadays, body fat percentage has increasing importance in the determination of body composition. High percentage of body fat is an important risk factor for obesity whose connection with diabetes, hypertension and other serious diseases such as cancer has been proved. In addition to this, the body fat percentage is an important role in decreasing of sporty performance. In this study, changes of body composition parameters of male and female students of School of Physical Education and Sports in Gaziantep University according to birth dates and genders were invesitgated with the help of circumference, length and weight measurements. Materials and Methods: A total of357 volunteers. 215 male students whose mean age was 22.470±0.163 years and 142 female students whose mean age was 21.183±0.150 years, participated. Age, height, weight, BMI (body mass index),% body fat (body fat percentage), waist-to-hip ratio and skinfold thickness measurements of the group participating to the study were obtained. Variance Analysis Technique was used for the comparison of group means in factorial design. Tukey's Multiple Comparison Test was used for the detection of the different groups. Results: As a result of age, weight, height, BMI, body fat percentage, waist-hip ratio measurements, the interaction of birth month x gender and the effect of the birth date was not statistically significant (p>0.05), the effect of gender was found statistically significant (p<0.05)according to results of variance analysis performed statisticallybetween two groups. Thus, it was specified that the differences between the genders didn't vary according to birth weight of athletes and didn't significantly affect the properties taken into account indifferences in birth months. On the other hands, gender differences have significantly affected the features taken into account. Except for% BF, means of male studentswere significantly higher than female students in terms of all the other features. Conclusion: It can be said thatthere is no significant difference between birth date and gender and gender difference affects all the other features in favor of males but means of females are higher than those of males with respect to BF %.

Keywords: Body Composition, Birth Month, Gender, Anthropometry, Physical Properties

### PP. 397 OCCURING OF SWIMMING INJURIES

Zeynep Tunçer <sup>1</sup>, <u>Erkan Çetinkaya</u><sup>2</sup>, Bilal Demirhan <sup>3</sup>, Ozan Sever <sup>4</sup>

- <sup>1</sup> Süleyman Demirel University Faculty of Health Sciences Department of Sport Sciences
- <sup>2</sup> Adnan Menderes University School of Physical Education and Sports
- <sup>3</sup> Ondokuz Mayıs University Faculty of Sport Sciences
- <sup>4</sup> Gazi University School of Physical Education and Sports

## POSTER PRESENTATIONS SPORT AND HEALTH SCIENCES

### **Abstract**

## **Purpose**

The aim of this study was to determine the swimming sport injuries and disabilities that occur in the body to detect any adverse effects.

#### Method

Engaged in the sport of swimming as a regular part of the study, and 112 women and 96 men participated in a licensed participated in swimming competitions. participants in the survey were used to obtain data on injuries from swimming. Obtained from the questionnaires were analyzed using SPSS 15.0 for Windows program.

## **Findings**

At the end of the research participants in the last 12 months, 18.3% and neck region, 11.5% per cent area of the right shoulder, and 5.8% right elbow area, 8.7% of right hand-wrist area,% 22.1 per cent upper back area, 19.2% waist area, 2.9% of the hip region, 16.3% third knee area and 14.4% of breast cancer are found to have foot area of disability. Participants with low levels of injury occurring in different anatomical regions of the injuries seen in daily life was affected negatively. In addition the majority of participants in the same area within a short time after the injury has been found again their disability. After a large portion of the participants in the life of higher education were swimming from their disability.

#### Result

As a result, lower rates of injuries that occurred in persons who participated in the sport of swimming, in turn, were negatively affected by disability than that of individuals living their lives. Therefore, the risk of injury with a low risk of injury in the sport of swimming pool to take down even more work needs to be done before we can say good warm-up.

**Keywords: Sports, Swimming, Disability** 

## PP. 412 INVESTIGATION THE PHYSICAL ACTIVITY LEVEL OF PHYSICAL EDUCATION STUDENTS

## İrem Uz<sup>1</sup>

### **Abstract**

## **Purpose**

Purpose of the study was to investigate the physical activity level of physical education students at Canakkale Onsekiz Mart University.

### Method

149 (100 male and 49 female)university students participated voluntarily in the study. The IPAQ (International Physical Activity Questionnaire) short form which has been used to determine physical activity level of students the reliability and validity was proved by Öztürk(2005) and Savcı et all.(2006). Participants was categorized as low intensity(inactive)(<600 MET-min/week) moderate intensity(minimum active)(600 –3000 MET-min/week) and vigorous intensity(>3000 MET-min/week) activities based on MET-min/week. After the (MET-min/week) calculation of all data descriptive statistics and Independent sample t-test were used to analyse data. Data were evaluated with SPSS.

#### Findings

The participant have  $5380,37\pm3371$  MET physical activity level (vigorous intensity). At the same time ,according to findings most of the participants were high intensity active (87,1 %). 12,9 % of participants were minimum active(moderate intensity) and there was no participants in inactive(low intensity) level. When the findings were compared according to class, it was found that there was a meaningful difference between fourth grade students and other students in physical activity level (p<0,05). It was revealed that first, second and third grade students has a higher score in physical activity level than fourth grade students(P<0.05).

<sup>&</sup>lt;sup>1</sup> Gedik University Faculty of Sport Sciences

### Result

It was concluded that physical education teaching department students have high scores in physical activity level in general but there was meaningful difference among grades(P<0.05). When grade progresses, the physical activity level decreases. Particularly fourth grade has a lower physical activity level in comparison with other students. It was stated that the reason lies behind that finding is theoratical lectures are taking more place rather than the practical lectures on the 4th grade.

**Keywords: Sport, Physical Activity, Physical Education** 

## PP. 458 PSYCHOMETRIC FINDINGS OF HIGH SCHOOL STUDENTS' PHYSICAL ACTIVITY EXERCISE STAGES OF CHANGE QUESTIONNAIRE

<u>Cevdet Cengiz</u><sup>1</sup>, Kübra Gültekin <sup>2</sup>

- <sup>1</sup> Çanakkale Onsekiz Mart University School of Physical Education and Sports
- <sup>2</sup> Çanakkale Onsekiz Mart University Institute of Health Sciences Department of Physical Education and Sports

#### Abstract

Objective: The aim of the present study was to test the reliability and validity of Turkish version of the "Physical Activity Exercise Stages of Change Questionnaire (PA-ESCQ)" for high school students. "Stage of Change" is one of the main construct in Transtheoretical Model (Prochaska and DiClemente, 1984) and explaining participants' exercise behavior through stage algorithm. PA-ESCQ is five items measure which is developed by Schumann et al. (2002) to determine stages of exercise behavior of individual. **Method:** 1283 high school students ( $n_{\text{male}} = 586$ ; Mage=16.14, SD=1.10 and  $n_{\text{female}} = 586$ ) 697; Mage=16.06, SD=1.07) voluntarily participated to this study. Stratified sampling method, based on the total number of students in each high school, was used for the selection of participants. "Godin Leisure-Time Exercise Questionnaire (GLTEQ)" and PA-ESCQ were administered to all participants. To test the validity of PA-ESCO, GLTEO was used as a validation measure of participants in the different stages of exercise by using One Way Analysis of Variance (ANOVA). Results: ANOVA results for each sex revealed significant difference in physical activity scores among female students (F(4,697)=11.16; p<.05) and male students (F(4,581)=17.66; p<.0.05) at different stages of exercise behavior. Besides, differences in the level of physical activity (light, moderate, strenuous) were tested among the participants at five different exercise stages of change by using ANOVA (p<0.05). Light, moderate and strenuous physical activity indicated significant difference between exercise stages of change of participants. Analysis also indicated high test-retest reliability score based on two weeks interval (ICC=0.87). Conclusion: It may be concluded that Turkish version of "PA-ESCQ" for high school students is reliable and valid measure to evaluate the physical activity exercise stages of change.

Keywords: Physical Activity Exercise Stages of Change, Reliability, Validity, High School Students

## PP. 462 INVESTIGATION OF PHYSICAL ACTIVITY LEVELS OF SECONDARY SCHOOL STUDENTS IN TERMS OF SOME PARAMETERS

 $\underline{\text{Mesut Hekim}}^1$ , Yılmaz Yüksel  $^2$ 

- <sup>1</sup> Mehmet Akif Ersoy University School of Physical Education and Sports
- <sup>2</sup> Erzurum Technical University Faculty of Sport Sciences

#### **Abstract**

The purpose of this study is to determine physical activity levels of secondary school students in terms of some parameters. 211 students taking education at different secondary schools in Denizli city

participated to study. International Physical Activity Questionnaire (IPAQ) Short Form was used in identification of physical activity levels. Chi-square and frequency analyses in SPSS 22.0 for Windows program were used in data obtained. In result of research, it was established that secondary school students' physical activity levels are differentiated statistically as age groups and family economic conditions (p<0,05). On the other hand, it was established that students' physical activity levels aren't shown differences statistically as gender, doing sport situation, there is a person who do sport in family (p>0,05). Besides, it was identified that majority of students is active at high level. As results obtained in research, it was thought that application of researches with bigger sample groups is required to better understand parameters effecting secondary school students' physical activity level.

Keywords: Secondary School Students, Sport, Physical Activity Level

# PP. 463 EXAMINATION OF PHYSICAL ACTIVITY LEVELS OF UNIVERSITY STUDENTS TAKING EDUCATION AT DIFFERENT DEPARTMENTS IN TERM OF SOME VARIABLES

Yılmaz Yüksel <sup>1</sup>, Mesut Hekim<sup>2</sup>

## **Abstract**

The purpose of this study is to examine physical activity levels of university students taking education at different departments in term of some variables. 149 students taking education at different department of Erzurum Technical University and Atatürk University participated to research. International Physical Activity Questionnaire (IPAQ) Short Form, which was used in physical activity levels in a lot of literature research, was used in identification of physical activity levels. Chi-square and frequency analyses in SPSS 22.0 for Windows program were used in statistical analysis of data obtained from research. It was established that students' physical activity levels aren't shown significant differences statistically as age, gender, their departments and economic conditions (p>0,05). On the other hand, it was established that students' physical activity levels are shown significant differences significantly as participation frequencies to sport activities out of lesson (p<0,05). It was identified that students' physical activity levels are intermediate level. Also, it was established the fact that there is inadequate facility and limited time to do sport are main reasons that students don't do physical activity at times out of lesson.

Keywords: University Students, Sport, Physical Activity Level

## PP. 508 THE INFLUENCES OF DIFFERENT SOMATOTYPES ON SOME PERFORMANCE TESTS

 $\underline{\text{Deniz Senol}}^1$ , Davut Özbağ  $^1$ , M. Emin Kafkas  $^2$ , Mahmut Açak  $^2$ , Özlem Baysal  $^3$ , Armağan Şahin Kafkas  $^2$ , Celal Taşkıran  $^2$ , Mahmut Çay  $^1$ , Derya Yağar  $^3$ , Gökmen Özen  $^2$ 

### Abstract

**Aim:** This study aimed to examine the flexibility tests (sit and reach tests), vertical jump tests, and 30 m sprint tests of İnönü University School of Physical Education and Sports (SPES) students that had

<sup>&</sup>lt;sup>1</sup> Erzurum Technical University Faculty of Sport Sciences

<sup>&</sup>lt;sup>2</sup> Mehmet Akif Ersoy University School of Physical Education and Sports

<sup>&</sup>lt;sup>1</sup> İnönü University Faculty of Medicine Department of Anatomy

 $<sup>^{\</sup>rm 2}$ İnönü University School of Physical Education and Sports

 $<sup>^3</sup>$  İnönü University Faculty of Medicine Department of Physical Medicine and Rehabilitation

different somatotype characteristics.

Material and Method: 179 students (107 males, 72 females) from different grades of İnönü University SPES participated in the study. The sit and reach flexibility test, the vertical jump test, and the 30 m sprint test were administered to the participants. Some anthropometric measurements were conducted for determining somatotypes: height, weight, skinfold thickness in four different places (triceps, subscapular, supraspinale, calf), bone width in two different regions (knee and elbow width), and two circumference values (arm, calf). Then the somatotype characteristics of all participants were calculated through the "Heath-Carter" formula. The "Kolmogorov Smirnov" test was performed for determining whether or not the data were homogenous. After it was found that the data did not have a homogenous distribution, the "Kruskal Wallis H" test was performed for multiple group comparisons. The data obtained in the study were analyzed via SPSS for Windows 21.0. The research data were presented in terms of arithmetic mean (X), standard deviation (sd), and p<.05 significance level.

**Findings:** 13 different somatotypes were found among the male students, and 12 different somatotypes were found among the female students. Among the male students having different somatotype characteristics, those who had the Mesomorph Ectomorph somatotype had the highest vertical jump scores; those who had the Endomorph Mesomorph somatotype had the highest flexibility scores; and those who had the Mesomorph Endomorph somatotype had the highest 30 m sprint scores. Among the female students having different somatotype characteristics, those who had the Central somatotype had the highest vertical jump scores; those who had the Balanced Endomorph somatotype had the highest flexibility scores; and those who had the Mesomorph Endomorph somatotype had the highest 30 m sprint scores. No statistically significant difference was found in all other somatotypes among the male students and the female students.

**Results:** No determinative difference was found in any somatotype characteristic in terms of vertical jumping, sit and reach flexibility, and 30 m sprint tests among the men and the women.

Keywords: Anthropometry, Somatotype, Performance

## PP. 509 EVALUATION OF PHYSICAL ACTIVITY LEVELS AND SKIN FOLD THICKNESS OF STUDENTS IN GOVERNMENT AND PRIVATE SCHOOLS

 $\underline{\text{Sinan Uğraş}}^1$ , Abdullah Güllü $^2$ , Esin Güllü $^2$ , Sercan Özeren  $^2$ 

#### Abstract

Aim: To evaluation of physical activity levels and skin fold thickness of students in state and private schools and to identify the differences between them.

Method: A total of 40 students participated voluntarily in the study, who were selected randomly from 7th grade students in private (n=20) and state schools (n=20), in Malatya. After the parents of participants signed the consent forms, the sense-wear (USA) portable armband (PA) was used to determine the level of daily physical activity. PA attached for 24 hours in the right arm triceps of students on 3 different days in without physical education lessons, and the obtained data transferred to the computer. Body Mass Index (BMI), daily energy consumption (DEG), daily step count (DSC), MET values, active energy consumption time (AECT), rest periods (RP) and sleep duration (SD) have been identified. Each subject's skin fold thickness was measured in the areas of triceps, subscapula, abdomen, iliac, thigh by skin fold caliper device (Holtain, UK). The assessments were performed according to the average of obtained data in 3 different days. To determine the differences between state and private school students, the independent samples t test for determining the parametric values, and the Mann-Whitney-U test for nonparametric values were used. Data were analyzed by the  $\pm$  0.05 significance level.

Result: Although significant differences were observed between the students' average stature, body mass, DSC, abdomen and thigh variables (p<0.05), the significant difference between the other average variables was not found (p>0.05). Although medium and high level relationship (r=0.68-0.89)

<sup>&</sup>lt;sup>1</sup> Ministry of National Education Malatya Alpaslan Secondary School

 $<sup>^{\</sup>rm 2}$ İnönü University School of Physical Education and Sports

was observed positively among the skin fold thickness with DEG and BMI (p<0.01), the weaknesses relationship (r=0.20-0.39) was found between the other MET, DSC and AECT variables (p>0.05). Conclusion: As there might be several reasons the differences between the stature and body mass of students in the state and private schools, it can be attributed the variability of the nutritional status that affect directly from development. It can be considered to be caused by the lack of significant differences between skin fold thickness and physical activity levels of students, except BMI and DEG values. In this study, it was concluded that there was not a significant difference between the physical activity and skin fold thickness of students in state and private schools. Therefore, it can be suggested to research on many students who are close to each other in stature and body mass by increasing the number of schools.

Keywords: Armband, Physical Activity, Energy Consumption, Bmi, Skin Fold Thickness

# PP. 519 EXAMINING THE INFLUENCE OF THE EXISTENCE OF PALMARIS LONGUS TENDON ON THE GRIP STRENGTHS OF STUDENTS HAVING DIFFERENT SOMATOTYPES

<u>Deniz Şenol</u><sup>1</sup>, Davut Özbağ <sup>1</sup>, M. Emin Kafkas <sup>2</sup>, Mahmut Açak <sup>2</sup>, Özlem Baysal <sup>3</sup>, Armağan Sahin Kafkas <sup>2</sup>, Celal Taşkıran <sup>2</sup>, Mahmut Cay <sup>1</sup>, Derya Yağar <sup>3</sup>, Gökmen Özen <sup>2</sup>

#### Abstract

**Aim:** This study aimed to examine the influence of the existence of palmaris longus tendon on the grip strengths of students studying in İnönü University School of Physical Education and Sports (SPES), having different somatotypes, and having no illness.

Material and Method: 179 students studying in İnönü University SPES and having no illness participated in the study. Among the students participating in this study, height and weight values, two circumference values (arm, calf), skinfold thickness in four different places (triceps, subscapular, suprailiac, calf), and bone width in two different regions (knee and elbow width) were calculated. The somatotype characteristics of all participants were calculated through the "Heath-Carter" formula. The Mishra's Test was administered to the participants for determining the existence of palmaris longus tendon. In checking the existence of palmaris longus tendon, the participants were requested to opposite their thumbs and littler fingers in the supination position and when wrists were in the flexion position. If tendon appeared in the middle of flexor carpi radialis at that moment, m. palmaris longus tendon was considered to exist. Grip strength was measured via the "Takei Hand Dynamometer". Grip strength measurements were performed three times for both arms, and the best values obtained were recorded in kg. The Turkish form of the "Oldfield Handedness Inventory" was used for determining handedness. The classification of the "Oldfield Handedness Inventory" adopted in the present study was as follows (5 categories): a) always right hand (+10 points), b) usually right hand (+5 points), c) using both hands (0 point), d) usually left hand (-5 points), e) always left hand (-10 points). Based on such scoring, a) 100 to 80 points referred to strongly right-handed; b) 20 to 75 points referred to weakly right-handed; c) 15 to -15 points referred to two-handed; d) -20 to -75 points referred to weakly left-handed; and e) -80 to -100 points referred to strongly left-handed. The data obtained in the study were analyzed via SPSS for Windows 21.0.

**Findings:** Although no statistically significant difference was found, the highest right hand and left hand grip strengths were found in the Balanced Mesomorph somatotype (45.3±9.3 and 41.7±7.8 respectively). The second highest right hand and left hand grip strengths were seen to be held by the individuals with the Endomorphic Mesomorph somatotype. Palmaris longus tendon was detected in both arms of 118 people; in the right arms of 17 people; and in the left arms of 12 people. 29 students were found to have no tendon. Right hand and left hand grip strengths were not found to be

<sup>&</sup>lt;sup>1</sup> İnönü University Faculty of Medicine Department of Anatomy

<sup>&</sup>lt;sup>2</sup> İnönü University School of Physical Education and Sports

<sup>&</sup>lt;sup>3</sup> İnönü University Faculty of Medicine Department of Physical Medicine and Rehabilitation

statistically significant by the existence of tendon (p>.05). No statistically significant difference was detected in grip strengths by handedness (p>.05). No significant difference was found between the grip strengths of two hands of the individuals having the Balanced Mesomorph somatotype who had equal mesomorphy and ectomorphy components (or the difference was not more than half a unit) (p>.05).

**Results:** In consideration of the research findings, it is safe to say that there was no difference between the grip strengths of the individuals having different somatotypes. In addition, it can be said that the existence or the lack of palmaris longus tendon does not influence the grip strength values of individuals. However, there is still a need for future studies to be conducted with a larger sample size and athletes of different levels.

Keywords: Palmaris Longus, Somatotype, Grip Strength

## PP. 528 THE ATTENDANCE TO SPORT OF WOMEN LIVING IN BILECIK, OBESITY PREVALENCE AND RISK FACTORS

 $\underline{\text{Raif Zileli}}^1$ , Önder Şemşek  $^2$ , Hüseyin Özkamçı  $^3$ , Gürkan Diker  $^4$ 

- <sup>1</sup> Bilecik Seyh Edebali University School of Health
- <sup>2</sup> Abant Izzet Baysal University School of Physical Education and Sports
- <sup>3</sup> Düzce University School of Physical Education and Sports

### Abstract

**Introduction and aim:** The aim of this study is to investigate the risk factors affecting obesity and the obesity prevalence in women who live in the city center of Bilecik and attend to walking events as a recreative activity.

Method: 79 voluntary women, between the ages of 18-54,(age: 36.2±10.4 year, height: 1,58±0.06 cm, weight: 79.29±14.61 kg)who exercise at Bilecik Şeyh Edabali Stadium by walking recreational are involved in this study. After the signed voluntary consent forms of participants who voluntarily wanted to participate in the study were taken, in order to carry out a detailed measurement, the heights, weights, fat rates, basal metabolic rates, waist circumferences and hip circumferences of participants were measured at the stadium by the researchers. With the aim of determining the attendance to sport, obesity prevalence and risk factors of all participants, they were made to fill an epicrisis form with the help of face-to-face meeting method. The variables such as professional status which may be thought as a risk in terms of obesity (housewife or one who has any kind of job), education level (illiterate-primary school graduate-middle school graduate-high school graduate-university graduate), social security (social security institution-retirement fund-social security organization for artisans and the self-employed), the habit of exercising regularly in the last six months (yes-no), the habit of dieting (yes-no) were evaluated as risk factors. The findings are shown as arithmetic mean, standard deviation or percentage with the help of SPSS ("Statistical Package for the Social Sciences") 17,00 packaged software.

**Findings:** The mean BMI of participants is 31.68. According to BMI, obesity prevalence is 62% in females. When the variance of obesity according to education level is analyzed, it is seen that %32 of the women are primary school graduate (%40,5), %7 of them are middle school graduate (%8,9), %23 of them are high school graduate (%29,1), %17 of them are university graduate (%21,5). When the variance of obesity according to professional status and social security is analyzed, it is seen that %56 of the women are housewives (%70,9), %23 of them work in any kind of job (%29,1), all the women, who are obese or not, have any kind of social security; social security institution (%64,6), retirement fund (%30,4), social security organization for artisans and the self-employed (%5,1). When the variance of obesity according to the habit of sport or diet is analyzed, it is seen that %84,8 of the women do not have a habit of exercising, %94 of them do not have a habit of dieting.

**Discussion and Conclusion:** It is seen that women who are primary school graduate mostly have obesity with the rate of %26,6 and when the education level gets higher, the rate of having obesity gets

<sup>&</sup>lt;sup>4</sup> Ankara University Institute of Health Sciences

lower. It is found that the rate of being obese among housewives is %40,5 and this rate becomes less among women who have a job. It has also ensued that obese women do not have a habit of exercising (%54,4) and dieting (%60,8). In the family which is the smallest unit of society, in the matter of struggling with obesity especially for women, the importance of getting them adopt the habit of exercising and the importance of education has come up once again.

Keywords: Obesity, Walking, Education, Housewife

## PP. 532 ELITE LEVEL IN TURKEY TENNIS PLAYERS IN THE PREVALENCE AND CAUSES INVESTIGATION OF INJURY

Orhan Ahmet Şener<sup>1</sup>, Taner Ziylan <sup>2</sup>

#### Abstract

**Aim**: The aim of this stdy was to determine the incidence, distribution of injuries, type of injuries, the cause of injury, and to determine psychosocial effects of injuries among the male Turkish tennis players.

**Methods**: During the outdoor season of 1990 - 1991, 86 randomly chosen tennis players were interviewed. The mean age of subjects was 21.5 years with a range of 16 - 37 years.

**Results**: Results of this study showed that 54.65%(47/86) of subjects were found to be injured. Of the injuries 82.98 % (39/47) was occured during training, while 17.02%(8-47) of injuries was occured during competition. Lower extremity injuries were greater than upper extremity injuries. (53.19 % (18/47) vs to 38.30 %) Of total 47 injuries 26 (55.31 %) of them were overuse, 12.77%(6/67) were strain, 29.79%(14/47) were sprain, 2.13%(i/47) was fracture and 8.5%(4/47) was back injuries. A total of 40.43%(19/47) of the players had serious injuries which caused players to be away from work and social activities. The serious injuries were sprain of knees (31.57 %, 6/19), sprain of ankles (26.32 %, 5/19), overuse of achilles tendon (10.52 %, 2/19), and overuse of forearm (5.26 %, 1/19). Thus, sprain constituted 57.89 % (11/19) of total injuries.

**Conclusion**: As a result of this study it can be concluded that sprain of ankles and knees caused stress of the injuried tennis players and kept them away from sportive and social activities.

**Keywords: Sports Injuries, Psycho-Social Factors, Stress** 

## PP. 709 COMPARISON BETWEEN FUNCTIONAL MOVEMENT SCREEN (FMS) AND BODY MASS INDEX OF THE SWIMMERS

 $\underline{\text{O}}$ ğuz Üçer $^1$ , M.İsmet Tok $^2$ , Erkan Günay $^2$ , Aksel Çelik $^2$ 

### **Abstract**

Aim: This study is made with the aim of evaluation of the relation between FMS and body mass index of the swimmers.

Method: This study consists of the swimmers including both boys and girls that take place in the first 24 between 11 and 12 years old in 2012. The volunteers including 49 girls and 44 boys and who have practice 6 days a week, 120 minutes in a day participated in this study. In the study, The volunteers' height, weight, and BMI were calculated then went through FMS. The FMS includes the following physical activities: deep squat, hurdle step, in-line lunge, shoulder mobility, active straight leg raise,

<sup>&</sup>lt;sup>1</sup> Selçuk University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Necmettin Erbakan University Faculty of Medicine Department of Anatomy

<sup>&</sup>lt;sup>1</sup> Dokuz Eylül University Institute of Health Sciences

<sup>&</sup>lt;sup>2</sup> Dokuz Eylül University School of Sport Sciences and Technology

## POSTER PRESENTATIONS SPORT AND HEALTH SCIENCES

trunk stability, push-ups and rotary stability. Results were evaluated with the SPSS 15.0 program and evaluated statistically with Mann Whitney U Test.

Result: According to the results of the study, there was a significant differences between BMI and hurdle step, in-line lunge and total FMS points (p<0.05). In contrast, no significant differences was found between BMI and deep squat, active straight leg raise, shoulder mobility, trunk stability, pushups (p>0.05).

Conclusion: The conclusion is that the scores (values) of BKI decrease and postural control, mobility, balance, stabilility and mobilization increas in the sportsmen who have practice regulary.

Keywords: Fuctional Movement Screen, Stabilization, Mobilization, BKI, Swimmer

PP. 38 A COMPARISON OF THE ATTITUDES OF STUDENTS TOWARDS "STUDENT-ACADEMICIAN RELATIONSHIP" AND "REASONS OF NOT BEING ABLE TO CONCENTRATE" IN SPORT MANAGEMENT DEPARTMENS OF PHYSICAL EDUCATION AND SPORT SCHOOLS (AKDENIZ UNIVERSITY EXAMPLE)

## Mustafa Haluk Çerez<sup>1</sup>

### **Abstract**

Our aim in this study is to explore the effect of students' relationship with lecturers on their concentration in learning process in Sport Management students in Physical Education and Sport Schools. In this study, a questionnaire was applied to 83 students in Sport Management Department, Akdeniz University School of Physical Education and Sport and "Student Academician Relationship" and "Reasons of not Being Able to Concentrate" were compared.

The questionnaire used for data collection was tested for validity and reliability. In statistical analyses, frequency distributions, mean and standard deviation were utilized. In comparisons ki square analyses were used. In all statistical tests,  $\alpha = 0.05$  is accepted. In this study 83 students in 1st, 2nd, 3rd and 4th classes were applied questionnaire. 57 (68,7%) of the participant students were men and 26 (31,3%) of them were women. When it comes to distribution of classes, from 1st classes 23(27,7%); 2nd 19(22,9%), 3rd 26 (31,3%) and 4th 15(18,1%) students were selected. 71(85,5%) of the students were graduaded from normal high schools and 13 (15,7%) from sport high schools. The university preference ranking of Sport management department was asked and 26 students preferred in first ranking (31,6%) and 50 students preferred in second ranking (60,2%). Besides these facts, we see the following results: The reason for preferring Sport management department: " is related to the future profession planned" (55 students, 66,3%); "The points are just enough for this department" (24 students, 28,9%). From this result, we can conclude that professional reasons came out and besides the scoring of the examination system was also coming out. Having information about Sport Management Department was also inquired and 55 students (66,3%) answered as yes, and 26 students (31,3%) as no. From these results, we can conclude that, more than half of the students made a preference consciously. Besides these we can conclude according to the results of the questionnaire

- -References for the lectures were not given to students beforehand, students were not directed to sufficient resources, when students asked, they were not approached dedicatedly and positively
- -When the time restriction of the lectures is considered, students were not shown enough concern and sympathy, the topics of lecture were not given with examples.
- -Lectures were not satisfactory in a professional point of view, more equipped graduates were not targetted, meanwhile, students were not given the opportunity and suitable environment to share their ideas, the environment of discussion and production of ideas were not provided for the students.
- -Lecturers were not considering number of students in the classroom, modern teaching methods were not applied satisfactorily, and students were not given any time for questions and answers
- -Lecturers were not positive in their approach to their students, lectures were not made interesting for the students. It should not be forgotten that, under these conditions the lectures will pass ineffectively
- -General knowledge and model examples were not given enough in order to make lectures more effective
- -Lecturers did not show enough concern for the questions and demands of the students, did not fill the gaps about professional subjects. It should not be forgotten that, these deficiencies will be reflected to the life and future.

The findings of the study revealed that students had difficulty in reaching resources, course time granted was insufficient, course contents were unsatisfactory concerning professional knowledge, contemporary teaching methods were not being applied, the behaviours of academicians towards students caused inefficiency, real life examples were used rare and academicians were not dealing sufficiently with problems. As a result suggestions to these problems were made taking into

<sup>&</sup>lt;sup>1</sup> Akdeniz University School of Physical Education and Sports

consideration of domestic conditions.

Keywords: Sport Management, Total Quality Management, Strategic Planning

# PP. 52 THE RELATIONSHIPS BETWEEN SERVICE QUALITY, CUSTOMER SATISFACTION AND CUSTOMER LOYALTY: AN EMPIRICAL INVESTIGATION OF FITNESS CENTER

Nur Savas <sup>1</sup>, Süleyman Murat Yıldız<sup>2</sup>

### **Abstract**

Consumers are becoming more interested in sports and physical activity as a way to improve their physical, mental and social health. As a result of consumers' increased interest in sports, physical activities and fitness centers have become crucial organizations that provide services to meet consumer demand, which in turn have created a very competitive landscape for the sports and physical activity service providers. Faced with intense competition, sports and physical activity organizations need to develop customer oriented strategies to be able to survive and achieve organizational goals. To this end, it is imperative that these service providers to concentrate their attention and energies to service quality, customer satisfaction and customer loyalty. Accordingly, a number of academic studies have investigated these constructs in the sports and physical activity sector during the recent years.

This study aims to investigate the relationship between service quality, customer satisfaction and customer loyalty constructs in fitness centers. Thus, this study modeled service quality as an independent variable, customer satisfaction as a mediator and customer loyalty as a dependent variable. The SQS-FC (Service Quality Scale for Fitness Centers) scale and customer satisfaction and customer loyalty scales were used as data collection instruments. The data used in the study was obtained from the customers of a commercial private fitness center located in the Aegean region, Turkey (N=129).

During the first phase of the analyses, a confirmatory factor analysis was used to determine the validity of the scales, and a Cronbach alpha reliability quotient was calculated to determine internal consistency. We then used correlation analysis to understand the relationships between service quality, customer satisfaction and customer loyalty variables. Finally, hierarchical regression analysis was used to determine the mediating effect of customer satisfaction between service quality and customer loyalty. The confirmatory factor analysis found that the fit indexes of the scales were at an acceptable level: Service quality ( $\chi^2$ =724.269, df=269,  $\chi^2/df$ =2.69; NFI=0.897; GFI=0.901; CFI=0.946; RMSEA=0.079), customer satisfaction ( $\chi^2$ =17.171, df=6,  $\chi^2/df$ =2.86; NFI=0.942; GFI=0.939; CFI=0.962; RMSEA=0.041), customer loyalty ( $\chi^2$ =41.283, df=15,  $\chi^2/df$ =2.75; NFI=0.913; GFI=0.931; CFI=0.951; RMSEA=0.053). Meanwhile, the reliability analysis showed that the internal consistency of the scales was high (the alpha value of service quality is 0.877, the alpha value of customer satisfaction 0.850 and the alpha value of customer loyalty 0.778). The results of the correlation analysis showed that service quality has a significant positive relationship with both the customer satisfaction and customer loyalty variables (P < 0.001). Moreover, while there is a moderate correlation between service quality and customer loyalty (r=0.407; P<0.001), there are strong correlations between service quality and customer satisfaction (r=0.637, P<0.001) and between customer satisfaction and customer loyalty (r=0.622; P<0.001). The final stage of the study examined the effect of service quality on customer satisfaction (Model 1), customer satisfaction on customer loyalty (Model 2) and service quality on customer loyalty (Model 3) using hierarchical regression analysis. Regression analysis results showed that the  $\beta$  value of service quality, which was 0.365 in Model 1, fell to -0.052 in Models 2 and 3, and its meaningfulness was lost. This decrease in the  $\beta$ value and the loss of meaningfulness indicates that customer satisfaction has a strong mediating effect between service quality and customer loyalty. These results demonstrate that customer loyalty is directly affected by customer satisfaction and indirectly affected by service quality.

<sup>&</sup>lt;sup>1</sup> Balıkesir University Institute of Social Sciences

<sup>&</sup>lt;sup>2</sup> Muğla Sıtkı Koçman University School of Physical Education and Sports

Based on the findings of this study, we argue that if sports and physical activity organizations want to create high levels of customer loyalty, they should seek to maintain high levels of customer satisfaction. In order to keep customer satisfaction levels high, they have to first continuously improve service quality. Moreover, in order to develop more effective marketing strategies and to be more competitive, customers' service quality perceptions, satisfaction and loyalty levels should be monitored and measured periodically by the management of fitness centers.

Keywords: Fitness Center, Service Quality, Customer Satisfaction, Customer Loyalty

## PP. 102 ANALYSIS OF SPORT-RELATED OBJECTIVES AND TARGETS IN STRATEGIC PLANS OF METROPOLITAN MUNICIPALITIES

## Levent Atalı<sup>1</sup>

<sup>1</sup> Kocaeli University School of Physical Education and Sports

#### Abstract

This study aims to examine the strategic objectives and targets of strategic plans of metropolitan municipalities, which are local government units offering service to a great majority of the population, in terms of sports services.

Document screening was used based on the content analysis method for the purposes of the research. 2010-2016 strategic plans of 16 metropolitan municipalities were downloaded from websites of the relevant municipalities for examining the objectives and targets of the said municipalities' strategic plans in terms of sports services. 327 strategic objectives and 1577 strategic targets from the obtained strategic plans were examined and their distribution was determined in terms of frequency and percentage by being grouped.

In conclusion, it was determined that strategic targets focused on "organizing national and international events," "constructing sports facilities" and "building recreation areas;" while strategic aims emphasized on "spreading sports activities citywide," "ensuring the city to become a sports city" and "raising a healthy society and generations."

Keywords: Strategic Management, Strategic Objective, Strategic Target, Metropolitan Municipality

## PP. 132 LEADERSHIP ABILITY AND SELF- EFFICACY OF THE TRAINERS WHO HAS BEEN COACHING INDIVIDUAL OR TEAM SPORTS

<u>Tuba Pidecioğlu</u><sup>1</sup>, Selçuk Gencay <sup>2</sup>

### **Abstract**

This research was conducted to analyze the leadership ability and self- efficacy of the trainers who has been coaching individual or team sports in the central districts of Kahramanmaras, Osmaniye, Hatay and Konya.

Accordingly, 104 trainers whose average of age is 29,97±5,86 were included in the sample group of the research.77 of the trainers were males and 27 of the trainers were females(%73.1 male and %26.0 female trainers).

In this research, data was used through personal information form and the Leadership Scales for Sports developed by Saleh & Chelladurai in 1980 and adjusted as The Trainers' Perception of Leadership by Tiryaki and Toros in 2001. Fort he scale, coefficient of cronbach alfa internal consistency was measured as 0.89. To quantify and evaluate the results obtained SPSS 17 packaged software was used.

<sup>&</sup>lt;sup>1</sup> Kahramanmaras Provincial Directorate of Youth Services

<sup>&</sup>lt;sup>2</sup> Kahramanmaraş Sütçü İmam University School of Physical Education and Sports

The test of normality of the data was tested by One–Sample Kolmogorov Simirnov and it was assumed that the data indicated normal distribution. Accordingly, the data was analysed by using parametric tests which are Indenpendent sample-t Test and One-way ANOVA. Significance level of the study was admitted as p<0.05 ve p<0.01

According to the results collected by the 104 trainers, %76,9 of them are individual sport trainers and %23,1 of them are team sport trainers. When we look at the statistics, it's clear that female trainers have higher ability to behave as a democratic leader than males do (p<0.05). The leadership styles of the trainers vary according to their educational background, level of being trainer, the year of labour (p>0.05). Comparing to others, team sport trainers and married ones behave more democratic leadership styles (p>0.05).

According to this finding, it was stated that female trainers have more democratic leadership style from male ones. In terms of the authoritative leadership sub-dimension, significant differences were defined among the genders statistically. (P<0,05). In other words, it was stated that female trainers have more authoritative leadership ability than males do.

As a result; when the differences of the leadership subdimensions depending upon the branches obtained from the individual and team sports trainers were analysized, a significant difference between the individual and team sport trainers was confirmed statistically at the democratic leadership subdimension. (P<0,05). In the light of this information, it was stated that team sports trainers have higher level of democratic leadership ability than individual sports trainers. (P<0,05). It may be said that the leadership ability vary according to the gender and individual or team sports. Also, it may be said that female trainers are more democratic and autocratic leaders than males, team sport trainers are more democratic leaders than individual sports trainers and married ones are also more democratic than singles.

Keywords: Trainer, leader, Leadership Qualities, sport

### PP. 137 ASSESSMENT OF RECENT PERIOD SPORT POLICIES

Gözde Algün Doğu<sup>1</sup>, A.Azmi Yetim <sup>2</sup>

<sup>1</sup> Aksaray University School of Physical Education and Sports

#### **Abstract**

Youth sports policy which is extremely important for the development of Turkey's growing influence in the international arena and dynamic young population, a larger and more powerful way to becoming the state and society are known to contribute (National Youth and Sports Policy Document). To give young people the habit of regular physical activity, determined and talented young people to grow as a top-level athletes, amateur sports and needed to be given adequate support, but can be performed with successful sports policy( (Yetim, 2010). In this study, recently out of sport policies aimed to evaluate the opinions of senior executives.

From this point of view, phenomenology among qualitative research designs has been selected in the research. Concordantly, individual interview has been done. The research sample have been created by purposive sampling methods. In the frame of the research, the datas have been maintained with the help of 13 voluntaries, using the semi- structured interview form. Research's datas have been evaluated with the methods "content analysis" and "constant comparative analysis".

With the development of the sport of slice of 42.2% of the participants, the intended purpose is United under the theme of youth. 46.1% of respondents were of the opinion that it is sufficient budget is allocated to the Ministry. International success: 32.7% of slices by participants adjustments of more than others has been the theme. The Ministry of youth and sports, the most needed it is seen that a 50% activity. The biggest shortcoming in the Turkish sports policies and errors in the Organization a slice 60% in the structure of the deficiencies and the targets were mentioned. Sports theme for much-needed regulation of 73.3% reclassification note part concentrated on organizational structure.

In evaluating the qualitative dimension of sports policies, recent sports policies should be addressed

<sup>&</sup>lt;sup>2</sup> Gazi University School of Physical Education and Sports

also the sport with youth strongly to his emphasis of the participants have been determined. As for the sports policies to manage; structuring the Organization originates expressed as necessary removal of impediments have been identified. However, the objective is to perform in terms of the financial dimension to its activities; It is seen that the budget enough.

**Keywords: Sport, Youth, Policy** 

## PP. 185 HISTORY OF OLYMPICS AND CONTRIBUTIONS OF OLYMPIC GAMES TO THE CITY

Mehmet Kargün  $^1$ , Oktay Kızar  $^3$ , <br/> <u>Mehmet Dalkılıç</u> Sihmehmet Yiğit  $^4$ , Tekin Öztür<br/>k $^4$ , Fikret Ramazanoğlu  $^5$ 

- <sup>1</sup> Marmara University School of Physical Education and Sports
- <sup>2</sup> Kilis University School of Physical Education and Sports
- <sup>3</sup> Bingöl University School of Physical Education and Sports
- <sup>4</sup> Namık Kemal University School of Physical Education and Sports
- <sup>5</sup> Sakarya University School of Physical Education and Sports

### **Abstract**

Olympic Games have been a means for providing peace between countries and people for ages. Olympic Games held in every four years have become a symbol of peace without doing any religion, language, and race and colour discrimination between people. Olympic Games gathering lots of sportsmen from different countries are the biggest sport organizations of the world. Though many problems and unwanted situations are experienced in Olympic Games, it has been representing the most crucial happening of the world for ages. Olympic Games developing and growing day by day is a universal sport field that covers and unite whole world. Host country in which Olympic Games are held has to put up with high costs for the organization to be perfect. So, that makes Olympic Games to be hold only in developed countries. Moreover, Olympic Games influence national economy positively by affecting tourism income of the country considerably.

Olympic Games, thecountryandbringingpeopletogether is one of thelargestorganizations. Olympic gamesandthehuman body withthepowerandskilldevelopment of thehumanmind in thefield of sports is universaltargetarea. Theworld'slargestsocialevents of the Olympic Games, without any discrimination to embracethe whole World (TMOK, 1985, s.9-10). Olympic gamesarebased on ancient Greekpolytheistic. Olympic gamesforthefirst time in Greekmythology is regarded as thegreatgod Zeus is issued in the name.Nowadaysthe modern Olympic Games, organizedeveryfouryears in anothercountry has become a symbol of peacebetweencountries. Olympic games, athletes, spectators, journalistsand TV withtheparticipation of thehighcost, is an expensivesportorganizations.

In this article countries where Olympic Games were held, effects of Olympics on the cultural and economic areas are examined. Inaddition, various aspects of the Olympics, its contribution to the country's economy has been dealt with

Keywords: Olympics, Cultural, Economic, Sport

## PP. 286 DETERMINATION OF LEADERSHIP ORIENTATION OF THE YOUTH LEADERS

 $\underline{\mathsf{Serkan}\;\mathsf{Kurtipek}}^1$  , Uğur Özer  $^2$  , Fatih Yenel  $^1$ 

- <sup>1</sup> Gazi University School of Physical Education and Sports
- <sup>2</sup> Hitit University School of Physical Education and Sports

### **Abstract**

Aim: The aim of the study was to determine leadership orientation of the Youth Leaders employed in

Turkiye as contractual workers at the ministry of youth and sports.

Method: The study group was composed of the Youth Leaders employed in Turkiye as contractual workers at the ministry of youth and sports. As the data collection tools; Leadership Orientation Inventory which was developed by Luthans (1992) and adapted into Turkish by Cömert (Çoban) (1999) was used and administered to 207 youth leaders. The inventory includes 35 items to determine leadership orientation of the Youth Leaders. The items are answered with "always", "frequently", "sometimes", "occasionally" and "never" and the subjects are asked to choose one option. Choosing the options of "always", "frequently" indicates the disposition to act like the behavior expressed in the item whereas choosing the options of "occasionally" and "never" indicates the disposition to act unlike the behavior expressed in the item. Choosing the option of "sometimes" indicates a neutral orientation for the behavior expressed in the item. To calculate the scores that will uncover leadership orientation of the participants; the option of "sometimes" takes 0 point because it does not indicate a certain behavior and other options take 1 point. The 1<sup>st</sup>, 2<sup>nd</sup>, 4<sup>th</sup>, 6<sup>th</sup>, 7<sup>th</sup>, 9<sup>th</sup>, 11<sup>th</sup>, 12<sup>th</sup>, 13<sup>th</sup>, 14<sup>th</sup>, 16<sup>th</sup>. 17<sup>th</sup>, 20<sup>th</sup>, 21<sup>st</sup>, 23<sup>rd</sup>, 25<sup>th</sup>, 27<sup>th</sup>, 29<sup>th</sup>, 31<sup>st</sup> and 33<sup>rd</sup> items describe the task-oriented leadership behaviors while the 3<sup>rd</sup>, 5<sup>th</sup>, 8<sup>th</sup>, 10<sup>th</sup>, 15<sup>th</sup>, 18<sup>th</sup>, 19<sup>th</sup>, 22<sup>nd</sup>, 24<sup>th</sup>, 26<sup>th</sup>, 28<sup>th</sup>, 30<sup>th</sup>, 32<sup>nd</sup>, 34<sup>th</sup> and 35<sup>th</sup> items describe people-oriented leadership behaviors. The task-oriented leadership behaviors can provide 20 point as the highest score while people-oriented leadership behaviors can provide 15 point as the highest score. The data obtained from the Leadership Orientation Inventory were analyzed with Statistical Package for the Social Sciences (SPSS) 17. For the analyses of the demographic data; frequency and percentage distributions were used. Leadership Orientations -the aim of the study- of the participant Youth Leaders were interpreted with mean scores and these mean scores were compared to some variables.

**Findings:** It was found out that 52.2% of the study group (n=108) were male participants, 63.3% (n=131) belonged to 23-27 age group, 50.7% (n=105) had 1-year period of service. According to the mean scores of the leadership orientation of the Youth Leader; mean task-oriented leadership behavior score was 14.74 whereas mean people-oriented leadership behavior score was 11.17.

**Result:** When the results obtained were examined; no statistically significant differences were seen in mean leadership orientation of the Youth Leaders in terms of variables of gender/sex, age and period of service. But it was noted that "task-oriented leadership behaviors" and "people-oriented leadership behaviors" scores were close to the total inventory score. As a result; it may be argued that the participant Youth Leaders demonstrated ideal leadership behaviors as far as ideal leadership means using both "task-oriented leadership behaviors" and "people-oriented leadership behaviors" in a balanced manner.

Keywords: Youth Leaders, Leadership Orientation, Sport

## PP. 402 LEADERSHIP STYLES OF SPORT MANAGERS SERVING IN TURKISH NATIONAL SPORT ORGANIZATION

Ferhat Gündoğdu<sup>1</sup>, Velittin Balcı<sup>2</sup>

### **Abstract**

**Purpose of the Study:** As in all organizations, being successful and getting maximum benefit in the area is of first priority objective for sport organizations as well. It is considered that leadership qualities and the other competencies of managers have an important place for achieving these goals. Having leadership characteristic for managers is an important concern for sport organizations as in all areas of management. While there are lots of researches regarding to examine relationship between managers' leadership styles and organizational variables, it is not at the same rate in the field of sport management studies related to the analysis of leadership styles. In this context, examining leadership styles of sport managers who works in the field of sport and are in decision-making position is

<sup>&</sup>lt;sup>1</sup> Turkish Armed Forces Sports School

<sup>&</sup>lt;sup>2</sup> Ankara University Faculty of Sport Sciences

considered as an important point. Purpose of this study is to identify leadership styles of high and middle level sports managers serving in Turkish National Sport Organization.

Research Methodology: Information was collected from 16 women and 203 men high and middle level sport managers, totally 219, who work at Turkey's Ministry of Youth and Sport, Governmental Directorate General of Youth and Sport, sport federations and the provincial directorate of youth services and sport. "Multifactor Leadership Scale 5X - (MLQ5X)" was used for data collection. According evaluation by them, dominant leadership styles of sports managers were determined by mean and standard deviation values. Mann-Whitney U test was used to compare two groups that were examined whether there is a differentiation or not according to their personal characteristics' influence on their leadership styles. For more than two groups, Kruskal-Wallis variance analysis statistical method was used. Also Mann-Whitney U test was used to find out the source of the differentiation. Significant level was based on as .05 for this research.

**Findings:** According to their assessment, transformational leadership style takes place mostly (=61,2747), the least one is laissez faire leadership style (=16,7033). When evaluated in terms of sub-dimensions of transformational leadership, it is obtained that the most one is idealized influence (=24,5549) and the least one is individualized support (=12,1813). For sub-dimension of transactional leaderships, contingent reward behavior takes place mostly (=9,8022). For their personal characteristics (age and education) there is no difference on their leadership styles but it changes according to their gender, experience and positions. According to this, women's sports manager's transactional leadership scores were higher than men sports managers (U=668,5, p<.05). Transactional leaderships [x2=(2)=7,486; p=,023; p>0,05] and laissez faire [x2=(2)=6,789; p=,033; p>0,05] leadership behaviors changes to their experience in the field. Lastly, their laissez faire leadership behaviors changes depending on their position [x2=(2)=23,848; y=0,000; y>0,05].

**Result:** At the end of the study, it is obtained that sport managers serving in Turkish national sport organization have dominantly transformational leadership characteristics. They have high scores of idealized influence which is sub-dimension of transformational leadership at the same time. Transformational leaders are known as respected, trustworthy, always keeping ahead of the needs of those who followed him, having ethics, principles and values. Also they are referred to with innovative features. As a conclusion, it is very important and positive result on behalf of national sports management that these sport managers have transformational leadership characteristics which is known and accepted as contemporary leadership styles.

Keywords: Sport Organization, Sport Managers, Leadership, Leadership Styles

## PP. 408 MINISTRY OF YOUTH AND SPORTS' STAFF PERCEPTION OF THE ORGANIZATIONAL CLIMATE AND ORGANIZATIONAL CREATIVITY LEVELS

 $\underline{\text{Umran Yahşi}}^1$ , Oğuz Özbek  $^1$ 

### **Abstract**

**Aim**: The purpose of this study is to investigate the relationship between the organizational climate perception and organizational creativity levels of the staff at the Ministry of Youth and Sports.

Methodolgy: We used screening model in this study aimed at determining the organizational climate perception and organizational creativity level of the staff at the Ministry of Youth and Sports of Turkey. The research universe composed of 1200 persons working at the Ministry of Youth and Sports. The data collection instrument was administered to 302 persons. We used Organizational Creativity Measurement and Organizational Climate Measurement developed respectively by Balay (2010) and Bilir (2005) in the collection and evaluation of data. The consent of the researchers was provided for the use of above mentioned measurement methods. According to the data collected in the study, the reliability coefficient of the organizational climate measurement and organizational creativity measurement was found .912 and .961 respectively. We decided to apply parametric or non-parametric test based on the homogenous distribution of the data.

<sup>&</sup>lt;sup>1</sup> Ankara University Faculty of Sport Sciences

**Findings**: A significant difference was found in the result of t test on views concerning the biometrical aspect of organizational climate by gender [ t(300)=2.24, p<.05]. When the views of female staff on the biometrical aspect of organizational climate was found (x=3.07), it was found (x=2.85) for male staff. It was identified that the biometrical aspect of organizational climate of female staff was more positive than that of male staff.

A significant difference was found as the result of variance analysis on the average scores for innovative climate aspect by age at a level of .05 [F(2; 299)=4.15, p<.05]. The average of views on the innovative climate aspect was (x=3,29) for participants aged between 20-29, (x=3,52) for participants aged between 30-39 and (x=3,08) for participants aged 40 and above. According to the Scheffe method used to find the different group; the average of views of participants aged between 30-39 was higher than that of participants aged between 20-29 and those who are 40 and above.

A significant difference was found as the result of variance analysis on the average scores for biometrical aspect of organizational climate by position at a level of .05 [F(2; 299)=4.06, p>.05]. The average of views on the biometrical aspect of organizational climate was found (x=3,02) for civil servants while it was found (x=2,71) for experts and (x=2,97) for managerial staff. According to the Scheffe method used to find the different group; the average of views of civil servants was higher than that of experts and managerial staff.

A significant difference was found as the result of variance analysis on the average scores for hierarchical aspect of organizational climate by position at a level of .05 [F(2; 299)=3.22, p<.05]. According to the Scheffe method used to find the different group; the average of views of civil servants was higher than that of experts and managerial staff. A significant difference was found as the result of variance analysis on the average scores for the relational aspect of organizational climate by position at a level of .05 [F(2; 299)=4.23, p<.05]. According to the Scheffe method used to find the different group; the average of views of managerial staff was higher than that of experts and civil servants.

A significant difference was found as the result of variance analysis on the average scores for communicative aspect of organizational climate by term of office at a level of .05 [F(2; 299)=2.89, p<.05]. The average of views on the communicative aspect was found (x=3.20) for staff working for 5 years and less; (x=2.96) for staff working for 6-10 years; (x=3.41) for staff working for 11-15 years and (x=2.92) for those working for 16 years and more. According to the Scheffe method used to find the different group; the average of views of staff working for 11-15 years was found higher than that of staff working for 16 years and more, for 5 years and less and for 6-10 years.

A significant difference was found as the result of variance analysis on the average scores for job satisfaction aspect of organizational climate by term of office at a level of .05 [F(2; 299)=3.19, p>.05]. According to the Scheffe method used to find the different group; the average of views of staff with 11-15 years of term of office was found higher than that of staff with 5 years and less term of office, with 6-10 years and with 16 years and more.

A significant difference was found as the result of variance analysis on the average scores for relational aspect of organizational climate by term of office at a level of .05 [F(2; 299)=3.44, p<.05]. According to the Scheffe method used to find the different group; the average of views of the staff working for 11-15 years was found higher than that of staff working for 5 years and less, for 6-10 years and for 16 years and more.

**Results**: In the conclusion of this study; following facts have been observed; according to gender, women respond to the biometrical aspect of organizational climate more positively than men. According to age, staff aged between 30-39 receive innovative climate aspect more favorably than staff aged between 20-29 and 40 and above; according to the position at the Ministry, managerial staff looks at relational aspects more favorably than experts and other civil servants. Civil servants have more points than managerial staff and experts with regard to the hierarchical and biometrical climate aspect. As for the relational, job satisfaction and communicative aspects according to the term of office; staff with 11-15 years of term of office responds to the communicative and relational aspects more warmly than other staff with a term of office for 16 years and more.

Keywords: Creativity, Ministry Of Youth And Sport, Organization, Organization Climate, Organizational Creativity

## PP. 413 DECISION-MAKERS OF THE PRIVATE SPORTS CLUBS PSYCHOLOGICAL VIOLENCE (MOBBING) DUE DILIGENCE: THE CASE OF IZMIR PROVINCE

Hülya Ünlü<sup>1</sup>, Pınar Güzel <sup>2</sup>, Sıdıka Atbinici <sup>2</sup>

### **Abstract**

The aim of this study; determined managers and coaches working in the club in Izmir, whether, they were exposed to mobbing and hardships their behavior to reduce or get rid of it is to identify. Data collection technique was utilized for the purpose of the survey. Dangaç (2008) formed and study used later Çiftçi et al (2010) business area and business structure of the study group considering the reorganized and the validity and reliability study re-done "Psychological Bullying (mobbing) Survey" is used. According to the questionnaire percentage frequency of gender and education level were taken into account. In addition, individuals divided into groups according to educational attainment Part  $1 \pm$  encounters only licenses based on their scores (20.30  $\pm$  3.71) and higher educated (22.92  $\pm$  6.48) groups, with statistically significant difference was found to be (p<0,05). By the Part 2 of the survey was not found points to statistically significant difference when compared to the group (p>0,05). As a result, analyzing responses to the survey questions in this group mobbing has seen ineffective. Between groups scores of calculated in the survey section were compared only in terms of education level, significant difference has obtained between undergraduate and graduate education. In proportion with higher levels of education of individuals are exposed to mobbing has been concluded. The results of analysis were not obtained significant differences.

Keywords: Mobbing, Decision Makers, Izmir

## PP. 434 THE ANALYSIS OF EXPECTATION AND SATISFACTION OF VOLUNTEERS WHO WORK FOR SPORTS ORGANIZATIONS

Sevim Güllü<sup>1</sup>, Abdullah Öztürk <sup>1</sup>, Bilge Donuk <sup>1</sup>

### **Abstract**

On successful completion of sports organizations, the role of volunteers great. Volunteers taking part in international sports organizations work as active as professionals and large organizations are to achive success with the support of the volunteers. In addition, as volunteers provide support in sports organizations to the sports managers, the importance of them for the sports organizations have started to the become more evident. The fact that of 93,4 percent of the people who are in charge in 1992 Albertville and Savoie Olympic Games were volunteers, and of 912 people in Atletissma meeting organizations were volunteers for the sports organizations. On the other hand, since volunteers have no metarial interest expectations, the people who are responsible for the organizations should take into consideration the capability needs and expectations and motivate them. The outcomes of working as a volunteers are self confidency, improving the ability to work with the self expression, the ability to work with the team and creating new areas and interests. The purpose of this study is to determine the level of expectations and satisfaction of the sports volunteers. The universe of this study are the students who are studying at Istanbul University in Physical Educaiton and Sports School in the 2013-2014 academic year. The sample population of the study are 100 students who has workes as volunteer in a sports organizations. A questionnaire were administrated to the participants which has two parts. In the first part personel information were asked and in the second part 31 questions were asked related to volunteering and organizations. Data were obtained after being evaluated by SPSS. According to the results obtained as for the personel and professional contribution of the organizations,

<sup>&</sup>lt;sup>1</sup> Gedik University Faculty of Sport Sciences

<sup>&</sup>lt;sup>2</sup> Celal Bayar University School of Physical Education and Sports

<sup>&</sup>lt;sup>1</sup> İstanbul University School of Physical Education and Sports

volunteers generally reports positively. But they stated that improvements should be made about the clothes of organization and food served. As a result, the minumum demands of volunteers in sports organizations should be met and they should be rewarded. Also they should be provided to perceive themselves as an important member of the team and their responsibilities and authority should be clearly expressed. It should not be forgotten that the most important expectation of the volunteers in to watch the matches, also their basic needs like transportation should be provided.

Keywords: Sports, Organization, Sports Organizations, Volunteering, Expectations and Satiscaftion of Volunteers

# PP. 486 INVESTIGATION THE EFFECTS OF LEADERSHIP STYLE OF SPORT MANAGERS ON ORGANIZATIONAL COMMITMENT, ORGANIZATIONAL CLIMATE AND JOB SATISFACTION

Yasemin Kemeriz<sup>1</sup>, Özhan Bavlı <sup>1</sup>

### **Abstract**

**Purpose:** The purpose of this study was to investigate the effects of leadership style of sport managers on organizational commitment, organizational climate and job satisfaction.

**Method:** Totally 172 participant who were work in provincial directorate of youth and sports in differents cities of Turkey joined voluntary. Data collected by using Leadership style survey which was developed by A. Fleishman (1960) and addapted in Turkish by Balci A. (1997), Organizational climate questionary which was developed by Aksoy (2006), Minnesota job satisfaction questionary which was developed by Weiss, Dawis, England ve Lofquist, (1967) and addapted in Turkish by Baycan F.A (1985) and organizational commitment survey which was developed by Allen ve Meyer (1990) and addapted in Turkish by Cetin (2006). SPSS 11,5 statistical program used for analysis.

**Findings:** Analysis showed that leadership style scores were focused on functional style  $(14.0\pm4.1)$ , average job satisfaction scores were  $69.4\pm14.5$ , average social, developmental and managerial climate scores were  $16.3\pm4.7$ ,  $15.3\pm4.1$  and  $15.6\pm4.7$  respectively, emotional, continue and normative commitment scores were  $20.1\pm3.9$ ,  $17.5\pm4.5$  ve  $17.7\pm3.9$  respectively. There was week and negative correlations with functional leadership and job satisfaction and emotional commitment ( r:-0.172 p: 0.024 ve r: -0.178 p: 0.019 respectively). Besides related leadership style had week and negative correlations with developmental, managerial and the job satisfaction (r:-0.155 p: 0.043, r:-0.240 p: 0.002 ve r:-0.208 p:0.006 respectively). There was week and negative correlations with status quo leadership style with continiue and normative commitment found.

**Conclusion:** According to findings it is possible to say that functional leadership style was dominant and it had week and negative effect on job satisfaction and emotional commitment.

Keywords: Job Satisfaction, Leadership Style, Organizational Climate, Organizational Commitment, Sport

## PP. 510 ASSESSMENT ON SERVICE QUALITY EXPECTATIONS AND PERCEPTIONS OF PEOPLE GETTING SERVICE FROM FITNESS CENTERS

 $\underline{\operatorname{Ersan}\,\operatorname{Tolukan}}^1$  , Hamdi Alper Güngörmüş  $^1$  , Halil Sarol  $^2$ 

## Abstract

Objective: This research aims to assess service quality expectations and perceptions of people who get

<sup>&</sup>lt;sup>1</sup> Canakkale Onsekiz Mart University School of Physical Education and Sports

<sup>&</sup>lt;sup>1</sup> Ağrı İbrahim Çeçen University School of Physical Education and Sports

<sup>&</sup>lt;sup>2</sup> Gazi University School of Physical Education and Sports

benefit from fitness centers in terms of some demographic variables (sex, marital status, membership period).

**Method**: The research population consists of 900 people subscribed to fitness center of Ağrı İbrahim Çeçen University; sampling group consists of randomly selected 158 people being 94 male (Mean<sub>age</sub>= 28.15± 5.05),64 female(Mean<sub>age</sub>= 26.33± 4.75). "Service Quality Assessment Scale" (SQAS) developed by Lam (2000), adopted into Turkish and tested for validity and reliability by Gürbüz, Koçak and Lam (2005) was used to collect data. In Turkish version of the scale, there are 36 items and 4 sub-dimensions titled (a) personnel, (b) program, (c) dressing room and (d) facility. The statements in the scale are assessed through 5-point Likert-type scale arranged as (1) Not Important at All and (5) Very Important. T-test and ANOVA tests were used for correlated samples in the analysis of the obtained data.

**Findings**: At the end of the analyses, it was found that the highest service quality expectation of participants from their fitness center is in "dressing room" (Mean= 4.36), the highest perception is in "facility" (Mean= 4.06) sub-dimensions. The results of the t-test analysis conducted for the correlated samples showed that there are statistically significant differences in personnel  $(t_{(157)}=8.194, p<0.01)$  program  $(t_{(157)}=8.717, p<0.01)$ , dressing room  $(t_{(157)}=9.735, p<0.01)$  and facility  $(t_{(157)}=6.954, p<0.01)$  sub-dimensions of "SQAS" scale. According to the results of the analysis conducted by the sex of participants, the only significant difference was found in facility  $(t_{(157)}=2.044, p<0.05)$  sub-dimension. It can be understood that scores of males related to service quality expectations and perceptions are higher than those of females. According to the results of the t-test, it was found that there is no difference between difference scores of participants in any sub-dimension of "SQAS". In addition, the result of ANOVA analysis conducted by the membership period of participants, the only statistically significant difference was found in "dressing room" sub-dimension. This difference was found to be between those who are members for less than 6 month and those having membership for 1 year or more.

**Conclusion**: In general sense, it was found that expectations of participants about fitness center are not satisfied well enough. It was found that as the membership period increases, the difference between expectation and perception mean scores decreases.

Keywords: Service Quality, Fitness Center, Expectations, Perceptions

## PP. 587 DECENTRALIZATION IN THE TURKISH SPORTS MANAGEMENT

## Enes Işıkgöz<sup>1</sup>

#### Abstract

**Aim**: The aim of this research is ,in the Turkish Sports management, depending on the decentralization of public management system of centerally organised Sports Management of the Youth and Sports Ministry, to analyse what are the opinions of the Mayors as the local administrators, The Youth Services of the Provinces as the Youth and the Sports Ministry and the Sports Managers, and also whether there exist vivid differences among the administrators based on their gender, mission, education and the length of service.

**Method**: In the research area, there exist 2950 Mayors (local managers), 728 Sports Managers of the Provinces and the Districts from Turkey. As for the samples of the research, there are 326 mayors and 252 sports managers of towns and provinces who work for the 16 Metropolitan Municipalities. As data collecting instrument, surveys have been applied. The surveys include 27 questions; 4 of them to identify personal characteristics, 23 of them are close questions and 1 open ended question about the research subject. Cronbach Alpha applied to find out the reliability of the survey was found as 8,5. In evaluating the symptoms, SPSS (Statistical Package for Social Sciences) 16.0 was used for statistically analysis. To evaluate the research data, in addition to the descriptive statistical methods, t-test and ANOVA were applied to compare the data among the gropus and Scheffe and Tukey were used to find out the group causing the difference. p<0,05 was based upon for the signifiance level among the groups.

<sup>&</sup>lt;sup>1</sup> Ministry of National Education Sakarya Serdivan Mehmet Secondary School

Firstly, the factor analysis was applied to evaluate the intelligibility of the data gathered from the surveys.

Findings: 516 managers participate in the surveys; 509 of them ( %98,6 ) are male, 7 of them ( % 1,4) are female. 162 of the managers (% 3,1) are the mayors of the metropolitan municipality, 135 of them (% 26,2) are central county commissioners, 159 of them (%30,8) are county commissioners, 310 of them are local administrators, 15 of them ( % 2,9 ) are managers of the city youth services, 191 of them ( % 37 ) are managers of the county youth services. The managers are categorized into two groups; the mayors are local administrators, the managers of the city and the county youth and sports services are sports managers. As groups; 310 local administrators (% 60,1), 206 sports managers (% 39,9) participated in the survey. When the managers' opinions about the Turkish sports management are considered, about the idea that the Ministry of the Youth and Sports develops more realistic and effective policies making use of the information gathered from the local administrations; almost all the local administrators (%84,8) and most of the sports managers agree with this idea, So it may be suggested that both of the groups have the same opinion about collecting data from the local administrations. About the idea that when the local administrations are authorised by the Ministry of the Youth and Sports, the workload of the centre, bureaucratic delays and bureaucracy are decreased; almost all the local administrators (%87,4) and most of the sports managers (%78,6) agree with this idea. As for the politics, when the views of the managers are regarded about the decentralization of the Turkish Sports Management; about the idea that local sports managers head for the services mostly favoured by the people with the decentralization of the Turkish Sports management which results in the alienation of the general pribciples and the aims of the sports; % 5,8 of the local administrators agree, % 80,6 of the local administrators disagree ( % 23,5 disagree at all ), about the same idea; % 69,0 of the sports managers disgree, % 21,4 of them are indecisive. The Mayors and the Sports Managers and the Youth Services of the City and County have the same opinion about the localisation. politics, planning and financing. Among the ideas of the Mayors and the Sports Managers and the Youth Services of the City and County; there isn't a notable difference in terms of gender. As for their education levels, among the ideas of the managers, a marked difference is figured out about the politics, planning and financing (p=0,01, p<0,05). As for their length of service, there is a notable difference in terms of planning(p=0,04, p<0,05). According to their education levels, the managers with high school degree or master's degree express their positive opinions about the decentralisation in terms of financing, According to their length of service, the ones with 6-10 years length of service have more positive opinions when compared with the ones having over 10 years length of service. Local administrators and sports managers, in sports management, have similar opinions about decentralization. However local administrators puts more emphasis on financing of the decentralization.

Conclusion: As a result of the research, it is necessary for the Turkish Sports to serve adopting the principles of self administration, providing decentralization in centrally organized Turkish Sports Management, also maintaining the services about sports, and the expectations and the interests of the people in sports, The importance of the localisation in the efficiecy and productivity of the sports services is emerged from the opinions of the sports managers resposible in the provinces. It is obviously seen that the local administrators are not unfamiliar with sports management and they are eager for these positions when the decentralization is provided. It is apparent that local administrators and sports managers are of the same opinion about the localisation, planning, politics and financing in decentralization of the sports management. From the research made for the Turkish sports organisation and according to the views of both the local administrators and the sports managers, it is emerged that decentralization in sports management is critacally important.

Keywords: Governance, Decentralization, Sports Management, Localisation

## PP. 611 RELATIONSHIP BETWEEN SUPPORTER AND MEDIA ON INTERNATIONAL FOOTBALL TOURNAMENTS (CASE STUDY :EURO 2008)

Gökalp Demir<sup>1</sup>, Aytekin Alpullu <sup>1</sup>

#### Abstract

The international football organizations merge the societies, enable them to compete, socialize the people as well constitute a great economic movement due to the popularity of the football. It's an industry reaching to billion liras in respect of its size as a result of the combination of various factors such as the broadcasting rights, television advertorials, accommodation chargers, electronic commodity sales, ticket sales, expenditures at the venue of the organization, etc. In the meantime, it's a mass of sport formed of many people in terms of leisure time activities, competitions, championships, tourism and health. At the same time, Euro 2008 news on ty,newspaper, radio and internet are the most popular tools during this organisation The television watching rates reach to the top level of that year or even the recent years during 15 days of the tournaments.

Key words: football, media, supporter

## PP. 643 INTERNET AND SOCIAL MEDIA UTILIZATION PREFERENCES OF BASKETBALL CLUBS IN TURKEY BEKO PREMIER LEAGUE

Sencer Özkal<sup>1</sup>, Yeşim Albayrak Kuruoğlu <sup>1</sup>, Hülya Ünlü <sup>1</sup>

### **Abstract**

The purpose of this study is to investigate the internet and social media preferences of basketball clubs in Turkey Beko Premier League. For this purpose exploratory research method was used. One of the remarkable results of this study is; although each club has an official website, eleven of them has direct links to social media accounts, where five of them doesn't have a direct facebook and twitter link specialized to basketball. Only Anadolu Efes, Olin Edirne, Pınar Karşıyaka, Uşak Sportif, Royal Halı G. Antep and Tofaş Sport Club have direct links and have accounts of facebook, twitter and instagram. However big clubs such as Fenerbahçe, Galatasaray and Beşiktaş give links to social media accounts not only for basketball team but also to their other sport brances. That's why it is hard to determine their user numbers as these accounts also considers other branch supporters such as football and voleyball. This study can be considered as a starting point for investigating the marketing stategies of these clubs via utilization of internet and social media means.

Keywords: Internet, Social Media, Basketball, Communication

# PP. 644 AN EVALUATION OF THE PARTICIPATION OF TURKISH FEMALE ATHLETES IN THE 2012 LONDON OLYMPICS AND ITS PRESS COVERAGE IN THE WRITTEN MEDIA

 $\underline{\text{Meliha Atalay Noordegraaf}}^{\,1}, \, \text{Dilsad Coknaz}^{\,2}$ 

#### Abstract

**Introduction and Purpose:** Many centuries ago women were not even allowed to be spectators of Ancient Olympic Games. Any violation of this rule was punished by death. In modern society since

<sup>&</sup>lt;sup>1</sup> Marmara University School of Physical Education and Sports

<sup>&</sup>lt;sup>1</sup> Gedik University Institute of Health Sciences

<sup>&</sup>lt;sup>1</sup> Freelance Researcher

<sup>&</sup>lt;sup>2</sup> Abant Izzet Baysal University School of Physical Education and Sports

then the participation of women in the Olympic Movement at all levels worldwide has changed considerably. Nowadays more sports and disciplines have been opened up to women at all levels and in most countries of the world. In the last 20 years especially, the International Olympic Committee (IOC) has pressed for the women's programme at the Olympic Games to be enlarged. This development has been further reinforced by the IOC's decision that sports seeking inclusion in the programme must include women's events.

Parallel to this woman sports and female athletes have started to become the focus of attention in the press. On the other hand, many studies in this area claim that in today's society males still are the dominating figures in sports. They receive a tremendous more amount of media attention than female athletes and moreover the media are much more likely to focus on them in a sexist manner. According to the Tucker Center for Research on Girls & Women in Sport "40% of all sports participants are female, yet women's sports receive only 4% of all sport media coverage and female athletes are much more likely to be portrayed in sexually provocative poses than male athletes". Studies related to media coverage of female athletes in Turkey stated that within the sports media perspective the media coverage of female athletes is an indicator of socialization. Media should use its power on women equality in the sports industry and to increase the impacts of female athletes. As role models female athletes might open new horizons for their gender and therefore they will directly affect sport participation and success of future generations in Turkey.

The largest number of Turkish female athletes taking part in Olympic history was during the 2012 London Olympics. In general a total of 10,820 athletes participated in these Games and 4,847 of them were female. Of the 114 Turkish athletes participating in these Olympics 66 were women. For the first time, Turkey was represented by more female than male athletes in the Olympic Games. In light of all this the purpose of this study was to evaluate the participation of Turkish female athletes in the 2012 London Olympics and its press coverage in the written media.

**Method:** A "document analysis method" was used to collect data. As types of document the Internet editions of the Turkish national newspapers were selected. Document scanning was structured within the news in the national newspapers in the context of the 2012 London Olympic Games between 1 July 2012 and 31 August 2012. Of this, news about the participation of Turkish female athletes in the 2012 London Olympics was scanned. The methods used to evaluate data included descriptive and content analysis. Data was analyzed using NVIVO-10 qualitative analysis software.

**Results:** The results of the content of news about the participation of Turkish female athletes in the 2012 London Olympics show in Figure 1.

The number of female athletes being more than the number of male athletes in the 2012 Olympics was a prominent topic in terms of participation. Until 2012 male athletes outnumbered women and it being the other way around in 2012 Olympics was one of the issues raised by the press. It was expressed as a subject worth studying in our male dominated country.

It was emphasized especially that in terms of women's participation the 2012 London Olympics was a first in Turkish sports history. This is beyond experiencing a first because "for the first time" occasions were the first women participation in Gymnastics and the medals won by Turkish female athletes in Track and Fields, also for the first time in history.

In other words, the Turkish female athletes became prominent in the media with many "firsts". Further news was the IOC's appreciation of Turkey in terms of women participation within the framework of women and sports policies of the IOC.

According to the news in the written press the groundbreaking participation of women in the 2012 Olympics was a revolution. It is understood that due to the greater participation female athletes also became the focus of attention in the written press. The 2012 Olympics were evaluated as "dominated by women" in terms of Turkey. The participation of female athletes was described by the press as presenting Turkey's modern face to the world and as a source of pride. It was also highlighted by the press that although women sport requires less investment it gained bigger success. Furthermore it was emphasized that this success also created an advantage for the future nomination of Istanbul for the Olympic Games.

**Conclusion and Recommendations:** According to the results it is possible to say that the female athletes experienced large attention from the written press as bringing many "firsts" to the Turkish sports history through their participation in the 2012 Olympics.

In order to ensure the sustainability of this success of women sports with further developments and to

inspire the next generations it is believed that the news about women sports and female athletes should not only focus on success. It is therefore recommended to encourage the continuation of press interest for women sport regardless of results achieved.

Keywords: 2012 London, Olympics, Women and Sport, Turkish Press

## PP. 663 INVESTIGATING JOB SATISFACTIONS OF PROFESSIONAL FOOTBALLERS FROM THEIR DEMOGRAPHIC CHARACTERISTIC'S POINT OF VIEW

Hayri Aydoğan<sup>1</sup>, A.Azmi Yetim <sup>2</sup>

- <sup>1</sup> Gümüşhane University School of Physical Education and Sports
- <sup>2</sup> Gazi University School of Physical Education and Sports

### **Abstract**

**Purpose**: The purpose of this study, is to investigate job satisfactions of professional footballers from their demographic characteristic's point of view.

Method: In this study, correlational and causal comparative methods were used. The sample of this study consists of 780 professional soccer players of 41 professional soccer club. Footbalers who are playing at Spor Toto Super League, Bank Asia Premier League, Spor Toto Second League and Spor Toto Third League on 2010-2011 season of Turkish Football Federation and they were selected by random selection method. In study, footballers were applied ''Demographic Information Forms'' and "Minnesota Job Satisfaction Scale" which were prepared by researchers. Demographic Information Form consists of some questions like; age, place of birth, date of birth, marital status, eduacation level, total professional game experience, playing position, annual income, and which league category they played in Turkish Football Federation (TFF). Minnesota Job Satisfaction Scale was developed by Weiss, Dawis England and Lofquist in 1967 and it was adopted to Turkish by Oran in 1989. Reliability co-efficient of original scale is .83. Reliability study in Turkey was carried out by Yıldırım in 1996 and Cronbach Alfa co-efficient was found as .90 and test-repeat test reliability co-efficient was found as .76. Minnesota Job Satisfaction Scale has 20 articles consisting of two sub-dimensions as internal and external and five point likert type.

**Findings**: As a result of analyse; according to age groups of participants, it was determined that there is a significant difference between groups from the point of job satisfaction. (F=6,477, F=6,777, F=6,280; p<0.05). While individuals aged 15-19 have (X=6,28347) job satisfaction points, it was determined that they are higher than individuals who are aged 30 (X=4,52301) and above. According to this result, it can be suggested that job satisfaction levels of professional footballers decrease as age goes by. From internal job satisfaction point of view, scores (X=3,52504) of participants who are at the age of 30 and above are significantly higher than (X=1,17732) participants who are at 20-24 age. This result contrary to general satisfaction; shows that as age goes by, internal job satisfaction levels of professional footballers increase. From external job satisfaction point of view, it was determined that; scores (X=2,86534) of participants who are at 15-19 age, are significantly higher than (X=2,15898) participants who are at 30 age and above.

According to other analyse results, it can be seen that there is a significant difference between professional working hours and internal satisfaction and general satisfaction which are from subdimensions of job satisfaction scale of participants. (F=2,504, F=3,721; p<0.05). Accordingly; from general job satisfaction point of view, it was determined that, participants who have been professional for 9 years and more, have significantly higher scores (X=3,74419) 3-4 years (X=1,27038) than participants (X=,67969) who have been professional for 7-8 years. From internal job satisfaction point of view, it was determined that, participants who have been professional for 9 years and more have significantly higher scores (X=3,33470) than participants (X=,80925) who have been professional for 3-4 years.

In the results of analyse, it was determined that there is a significant difference between job satisfactions and income (F=9,884, F=9,871, F=7,806; p<0.05). From general job satisfaction point of

view;it was determined that participants who have 200.000 Tl income and above (X=8,49304), have a significantly higher score than participants who have 1.000-20.000 Tl income (X=4,15484). Both from internal job satisfaction point of view (X=5,15714) and external job satisfaction point of view (X=3,33590) of it was determined that participants who have 200.000 Tl income or above; have higher job satisfaction than all the individuals included in study.

According to the results; it was determined that there is a significant difference between groups towards the type of league which they play football in from job satisfaction point of view (F=31,287, F=29,087, F=27,248; p<0.05). Accordingly; from general job satisfaction point of view, footballers who play in Spor Toto Super League (X=13,44028), have significantly higher job satisfaction than Bank Asya (X=10,86111), Second League (X=6,01282), and Third League (X=4,84829) footballers. When considered from internal satisfaction (X=8,10474) and external satisfaction (X=5,33555) points of view, it was determined that these are similarly higher.

In addition, as a result of analyse, there is no significant difference from position variable and education level variable, marital status and place of birth variable points of view among the groups.

**Result**: As a result, it can be seen that there is a lot of significant relationship among demographic characteristics, job satisfactions and sub-dimensions of job satisfaction of professional footballers.

Keywords: Professional Footballer, Job Satisfaction, Demographic Characteristics

## PP. 683 THE SERVICE QUALITY OF RECREATIONAL SPORTS CENTERS IN CAMPUSES OF UNIVERSITY: COMPARISON OF PUBLIC-PRIVATE UNIVERSITY

Ali Eraslan<sup>1</sup>, Zafer Çimen <sup>1</sup>

### **Abstract**

**Purpose**: The aim of this research was to compare service quality presented by recreational sports centers on public and private universities' campuses and to determine whether differences exit between students' perceived service quality.

**Method**: Participants of the study constituted of total 535 (383 male and 152 female) people who are attending from three public universities (266 students) and three private universities (269 students). Measurement as a tool was used the Scale of Quality in Recreatinal Sports Services (the Scale of Service Quality in Recreational Sport: SSQRS, Ko and Pastore (2005)) that it's validity and reliability have been maden for Turkey by Köşker Demir and Çimen (2012). In the statistical analysis, t-test was used to investigate whether a significant difference exit at the levels of service quality perception of students who use recreational sports centers according to the type of university.

**Findings**: According to results obtained from research, service quality perception levels of student who use recreational sports centers on campuses of the universities compared according to the university type, a significant difference was observed in point of the total score of quality perception of the Scale of Quality in Recreatinal Sports Services (p<0,05). In addition, considering the subdimensions (program, interaction, output, physical environment), a significant difference was found in the sub-dimension of "program quality" and "physical environment quality" (p<0,05). Accordingly, the scores of service quality presented by recreational sports centers on campuses of private universities is higher than public universities in the sub-dimenson of "program quality", "physical environment quality" and the total score of the Scale of Quality in Recreatinal Sports Services.

**Conclusion**: As a result, service quality perception levels of students in private universities is higher than students in public universities in the sub-dimenson of "program quality", "physical environment quality" and the total score of the Scale of Quality in Recreatinal Sports Services.

Keywords: University, Recreation, Sports Center, Service Quality

<sup>&</sup>lt;sup>1</sup> Gazi University School of Physical Education and Sports