

NOVEMBER 17-20, 2004

The 10th ICHPER • SD EUROPE
CONGRESS

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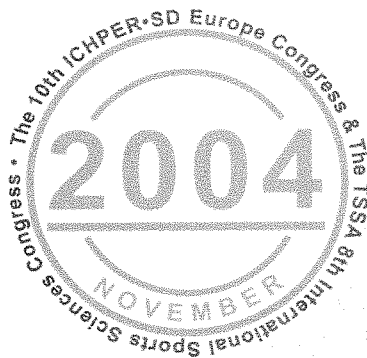
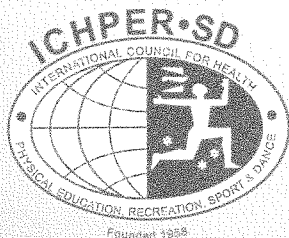
The TSSA 8th INTERNATIONAL
SPORTS SCIENCE CONGRESS

ABSTRACT BOOK

*" IMPROVING THE STANDARDS OF LIFE
IN TECHNICAL AGE THROUGH HPERSD "*

www.eurocong2004.org

MIRAGE PARK RESORT • ANTALYA • TURKEY



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MIRAGE PARK RESORT • ANTALYA • TURKEY

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Recognition, Welcome and Appreciation:

In a Spirit of Celebration with the Congress Theme (Improving the Standards of Life in the Technical Age through HPERSD) of the 10th ICHPER-SD Europe Congress Held jointly with the Turkish Sport Sciences Association's 8th International Sports Science Congress in Antalya, Turkey and in the Pursuit of Excellence through the Mission of ICHPER-SD in Antalya, Turkey, November 17-20, 2004

By

Dong Ja YANG, Ph.D., ICHPER-SD President

Distinguished President Dr. Hasan Kasap of the 10th ICHPER-SD Europe Congress and of the TSSA 8th International Sports Sciences Congress; President & CEO Mustafa Gurbuz of SERENAS Tourism and Congress Organizing Co.; members of the Organizing Committee, guest speakers, presenters, professors and scholars, participating professors, teachers and students, ladies and gentlemen...

It is indeed a very special honor for me to extend our sincere recognition, welcome and appreciation to all, each and every one of you, at this great assembly of the Opening Ceremony of the 10th ICHPER-SD Europe Congress and the TSSA 8th International Sports Sciences Congress in Antalya, Turkey. As you know, our organization, ICHPER-SD, which was founded in 1958 in Rome, Italy, is one of the oldest and largest HPERSD professionals' international umbrella organizations and has organized and delivered numerous prestigious world and regional congresses, like this great congress, throughout the world.

What a wonderful gathering this is! What a magnificent facility! We are truly blessed to have an opportunity to take part in this great joint Congress in Antalya, one of the most beautiful and interesting cities in the world. It enjoys a beautiful Turkish cultural uniqueness and a heritage imbued with the Mediterranean flavor. I have met so many people here with warm hearts filled with generosity, peace and love.

May we especially pay the most sincere tribute to all contributing organizations and colleges and universities in Turkey: the Turkish Sports Sciences Association, the Marmara University, the Hacettepe University, the Akdeniz University, the Bolu Abant Izzet Baysal University, the Ankara University, the Gazi University and many other universities as well as local, state and national governments for their cooperation and support of this Congress.

Through this congress, we, once again, reaffirm our commitment and reiterate the academic and social values and importance of HPERSD as an integral and indivisible element of education as a whole – throughout one's life span. Our purpose here is to share and disseminate the most current scientific and pragmatic discoveries, thereby leading to the formulation of the most advanced theories and methodologies, and create innovative new directions

for a peaceful 21st century. Through this process, our dimension of knowledge will be highlighted and expanded, our search for wisdom advanced, our level of understanding deepened, and our inquiries in science answered – ultimately we will in a better position to serve our profession, and to establish programs to include and benefit all global citizens – the citizens of Antalya, of Turkey, of Europe and the world.

On behalf of ICHPER-SD, I as President wish to present a Distinguished Special Commendation Award to Dr. Hasan Kasap, President of the Organizing Committee for his outstanding leadership and contribution; and President & CEO Mustafa Gurbuz of SERENAS Tourism and Congress Organizing Co., for his sponsorship of the Congress and his distinguished service and support of ICHPER-SD. Without their commitment, leadership excellence and contribution, this successful academic and science based congress could not have been actualized.

In addition, we would like to present the Plaque of Appreciation to: Prof. Dr. Sami Mengutay, Dean, School of Physical Education and Sport, Marmara University for his invaluable support of the Congress; Dr. Kamil Ozer and Dr. Umit Kesim, Vice Presidents for the Organizing Committee; Dr. Salih Pinar, Secretary General of the Organizing Committee; Prof. Dr. Hasan Kasap, President of the Turkish Sports Sciences Association (TSSA), and Dr. Caner Acikada, Chair of the Scientific Committee; Mrs. Bikiem Inanc, Special Project Director of SERENAS for the Journal of ICHPER-SD; in recognition of their extraordinary contribution – making it possible to actualize this congress as an outstanding academic and scientific forum.

Before closing out this part of the Opening Ceremony, ICHPER-SD would like to award a Plaque of Commendation to Dr. Ilhan Odabas, who has helped so much to build the bridge of program partnership between ICHPER-SD and TSSA with its HPERSD professionals in Turkey. We truly recognize her intuitive role for highlighting the importance of international cooperation and organizational solidarity for the sake of our profession and professional beliefs.

May your participation in this Congress be one of the most rewarding and memorable scholarly experiences in your journey and pursuit of professional excellence!

I thank you, thank you and thank you.

Dear Colleague,

On behalf of the organizing committee, it is a pleasure to extend my greetings and an honor to invite you and your colleagues to participate in The 10th ICHPER·SD European Congress and the TSSA 8th International Sports Science Congress which will be organized jointly during 17th - 20th of November 2004 at the Mirage Park Resort, Antalya, TURKEY.

The mutual theme of both congresses will be, "Improving the Standards of Life in Technical Age Through HPER·SD". Our hope and objective is to prepare an atmosphere in which the contemporary developments in the field of health, physical education, recreation, sports and dance will be discuss thoroughly. Discussions will be related especially to the influences on the living standards of individuals in Europe and the World.

We are hoping that the well known academicians, technicians, and those who are interested to our field will be gathered in Antalya, next to the eternal flame of Olympus Mountain, by the endless natural beauties of Mediterranean Coast and covering the world's historical heritage. We believe that it will be an unforgettable experience for everyone.

Let us meet to gather and share the current social and scientific developments in our field, and combine them with the historical and cultural richness of Antalya.

Hasan KASAP, Ph. D.
Vice President ICHPER·SD Europe,
President, Sports Sciences Association of Turkey

VERY SPECIAL THANKS TO:

- GENÇLİK VE SPOR GENEL MÜDÜRLÜĞÜ
- SPOR TOTO
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* according the alphabetical order.

GENERAL INFORMATION

CONGRESS DATE & LOCATION

The congress will be held between November 17–20, 2004 in Kemer, Antalya.

VENUE

Mirage Park Resort Hotel

CONGRESS LANGUAGE

Official language of the congress will be Turkish and English. Translation service will be provided in main meeting halls.

IN SERVICE TRAINING SEMINARS

Seminars will be held on November 17–18, 2004 at the congress venue.

PRESENTATIONS

Oral and poster presentations will be made for participants during the congress period.

CERTIFICATE OF ATTENDANCE

A certificate of attendance will be given to participants on request at the registration desk at the end of seminars and congress.

AWARDS

Two rewards are placed on for the presented announcement and research for the "10th ICHPER SD Europe Congress & The TSSA 8th International Sports Science Congress".

1. **Best study on health and sports will be rewarded as "Sports Health Sciences Kut Sarpyener Price" in the name of Prof. Dr. Kut Sarpyener: Sports Health Sciences Price will be given to the candidates by the evaluation of the jury.**
 - a) Best Oral Presentation
 - b) Best Poster Presentation

2. **The traditional prize of the "Turkish Sports Sciences Association" will be given to the all candidates that are relevant to the sport sciences, by the evaluation of the jury.**
 - a) Best Oral Presentation
 - b) Best Poster Presentation
 - c) Young Researcher Encouragement

**THE 10TH INTERNATIONAL COUNCIL FOR HEALTH, PHYSICAL EDUCATION,
RECREATION, SPORT, AND DANCE (ICHPER·SD) EUROPE CONGRESS
&
THE TSSA 8TH INTERNATIONAL SPORTS SCIENCE CONGRESS**

IN SERVICE TRAINING SEMINARS

- Sports Culture and Olympic Education Seminar - Seminar Hall 1
 - * 17 November - 9:00–17:00
 - * 18 November - 9:00–17:00
- Fitness Leadership Seminar - Seminar Hall 2
 - * 17 November - 9:00–17:15
 - * 18 November - 9:00–17:15
- Movement Analysis Seminar - Seminar Hall 3
 - * 17 November - 9:00–17:30
 - * 18 November - 9:00–17:30

SCIENTIFIC PROGRAM

November 17, 2004

- 10:00–17:30 **Registration**
15:00–18:30 **Opening Ceremony**

November 18, 2004

07:00–08:00 **Morning Activities**

09:00–09:30 **HALL A**

The Speech of the President of the ICHPER·SD:

Dong Ja Yang

Over 40 Years Togetherness of the ICHPER·SD and UNESCO

09:30–10:30 **Life Standards in Technological Age**

Walter Tokarski

10:30–11:00 *Coffee Break*

Poster Presentation

11:00–13:00 **Sports Performance**

Moderator: Kamil Özer

- Genetics in Superior Sport Performance, *Vasilis Klissouras*
- Talent Selection: Is it Necessity or Sacrifice?, *Kamil Özer*
- Coaches' Role in Superior Athletes, *Piotr Unierzyski*

HALL B

Physical Activity and Children

Moderator: Chantal Simon

- Obesity Prevalence in Children, *Hüsrev Turnagöl*
- Children Physical Activity and Nutrition, *Carine Klein-Platat*
- New Trends in Physical Activity for Children, *Chantal Simon*

HALL C**Physical Education and Sports***Moderator: Hasan Kasap*

- New Trends in Physical Education, *Susan Capel*
- Physical Education: Is it a necessity or is it a tradition?, *Giyasettin Demirhan*
- Adapted Physical Education in Children, *Dilara Özer*

13:00–14:00 *Lunch*

14:00–15:00 **HALL A****Post Evaluation of 2004 Athens Olympics**

- Media Aspects, *Gilad Weingarten*
- Performance Aspects, *Marco De Angelis*

HALL B**Sport, Culture and Society through the Ages: Turkey as a Case in Point***Manfred Laemmer***HALL C****Football and Science Seminar 1***Moderator: Mustafa Ferit Acar*

- Performance Analysis in Football, *Alper Aşçı*
- The Evaluation of The Football Championship, *Hasan Gören*

15:00–15:30 *Coffee Break*

Poster Presentation**15:30–17:30** **HALL A****Panel 1: Women in Sports***Moderator: Gül Tiryaki*

- Shokouh Navabinejad
- Nefise Bulgu

Panel 2:*Moderator: Emin Ergen*

- Yeliz Ay
- Lale Orta
- Ceren Uyguner Üstün

HALL B**Evaluation of Athlete's Health***Moderator: A. Turan Aydın*

- The Complete Assessment of Athlete's Health, *Emin Ergen*
- Post Traumatic Sports Injuries, *A. Turan Aydın*
- Integration of Sports Science and Sports Medicine, *Zafer Haşçelik*

HALL C**Psycho-Social Perspectives in Sports***Moderator: Lew Hardy*

- Motivation in Sports and Exercise: A case of Achievement Goal Theory, *Chris Harwood*
- New Trends in Exercise and Sports Psychology, *Lew Hardy*
- Sports and Integration Policies in Local, National and International Level: A Critical Analysis, *Bart Vanreusel*

17:30–18:30 **Tournaments**

November 19, 2004

07:00–08:00 **Morning Activities**

08:30–09:30 **HALL A**

Education in Physical Active Life Style: European Perspective
Alberto Madella

HALL B, C, D: Oral Presentations

09:30–11:30 **HALL A**

The Role of PE in Sports

Moderator: Ibrahim Yıldırım

- Fundamental Principles of Olympic Education, *Atilla Erdemli*
- Movement Education, *Mehmet Inan*
- The Role of PE in Fair – Play, *Ibrahim Yıldırım*

HALL B

Health Improvement Through Physical Activity and Sports

Moderator: Nezih Hekim

- Exercise and Immune System, *Nezih Hekim*
- Exercise and Diabetes, *Ali Murat Zergeroğlu*
- Exercise and Cardiovascular Disease, *Serdar Akgün*

HALL C

Aging (Third Age)

Moderator: Hakan Gür

- Osteoporosis and Exercise, *Gülseren Akyüz*
- Obesity Management and Weight Control, *Jean-Michael Oppert*
- Back Pain and Exercise, *Fusun Toraman*

HALL D: Oral Presentations

11:30- 12:00 *Coffee Break*

Poster Presentation

12:00 – 13:00 **HALL A**

Sports Law and Organization

Kismet Erkiner

HALL B

Sports, Peace and Human Rights: From Olympic Medal to Nobel Peace Medal

- Don Anthony
- Şamil Erdoğan

HALL C

Distance Learning

Carlo Di Benedetta- Giuseppe Gibelli

HALL D

Tennis and Science

Moderator: Ümit Kesim

- Osman Kermen

13:00

14:00

15:30

16:00

16:00

16:45

17:30

17:30

17:30

13:00–14:00 *Lunch*

14:00–15:30 **HALL A**

Panel: **Sports Culture and Media**

- Atilla Gökçe
- Onur Belge
- Zeki Çol

HALL B

Panel 1: **Adventure Education in PE**

- Fritz Seewald

Panel 2: **Extreme Sports**

Moderator: Gıyasettin Demirhan

- Yılmaz Sevgül
- Gökhan Türe

HALL C

Skeletal Muscle Plasticity and Underlying Mechanisms

Moderator: Haydar Demirel

- Transitions of Skeletal Muscle Fiber Phenotypic Profiles, *Haydar Demirel*
- Mechanism of Disuse Muscle Atrophy, *Scott Powers*

HALL D: Oral Presentations

15:30–16:00 *Coffee Break*

Poster Presentation

16:00–17:30 **HALL A**

Workshop: **Play, Music, Dance**

- Wolfgang Tiedt
- Ak Devrim Sirmalı

HALL B

16:00–16:45 Workshop: **Bandaging for Sports Injuries**, *Mustafa Karahan*

16:45–17:30 INTERFARMA Workshop

Bandaging for Sports Injuries, *Michel Bosch (INTERFARMA)*

HALL C

Football and Science Seminar 2

Moderator: Asaf Özkara, Ali Kızılet

- Physiological Approaches to Training, *Rüştü Güner*
- An Approach to Football Training Practises, *Ersun Yanal*
- An Approach to Technical and Tactical Practises in Football, *Ersun Yanal, Özcan Bizati*

HALL D: Oral Presentations

17:30–18:30 **MEDİ – KİM FIRM PROMOTION MEETING**

17:30–18:30 Outdoor- Workshop: **Golf**

- Yusuf Güllüer

17:30–18:30 **Tournaments**

November 20, 2004

07:00–08:00 **Morning Activities**

08:30–09:30 **HALL A**

Quality Assurance and Accreditation in Flanders, Ignace Van Dingenen

HALL B

The Impact of Religion on Sports and Sports Medicine, Wahit Al Kharushi

HALL C,D : Oral Presentations

09:30–10:00 *Coffee Break*

Poster Presentation

10:00–12:00 **HALL A**

Technology in Sports

Moderator: Fehmi Tuncel

- Sports Informatics – Computer Tech, *Alberto Madella*
- Sports Equipment Technology 1-2, *Serdar Aritan, Itila Tümer*

HALL B

Recreation

- Sport and Tourism, *Bekir Akkaş*
- Corporate Recreation, *Ümit Kesim*
- Sports and Law, *Miroslav Cerar*

HALL C

Training Science

Moderator: Kemal Tamer

- Monitoring Training Load in Sport, *Piotr Unierzyski*
- Testing Endurance Capacity: How Valid and Reliable, *Ulrich Hartmann*
- Testing Anaerobic Power and Capacity in Sports: How Relevant?, *Marco De Angelis*

HALL D: Oral Presentations

12:00–13:00 *Lunch*

13:00–15:00 **HALL A**

**With The Assistance of "POWERADE Sport Drink"
New Trends in Performance Analysis**

Moderator: Birol Çotuk

- Performance Analysis, *Ulrich Hartmann*
- Biomechanics Analysis of Shoes, *Mustafa Karahan*
- Sport Drinks: Do They Help?, *Scott Powers*

HALL B

Sports Management and Administration

Moderator: Gazanfer Doğu

- Sports Economy, *Ahmet Gülüm*
- Sports Marketing, *Hasan Birol Yalçın*
- Sports Sponsorship
- *Kaan Ark (BJK Sponsorluk Komitesi Üyesi)*

HALL C, D: Oral Presentations

15:30–16:30 **Tournaments**

17:00–18:30 **Closing Ceremony**

**ORAL & POSTER
PRESENTATIONS
program**

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ORAL PRESENTATIONS

program

19.11.2004

Hall B	Moderator: Birol Çotuk	Hall D	Moderator: Serdar Arıtan
8:30-8:40	S001 Behavioral Sciences	8:30-8:40	S011 Movements and Training
DIRECTION AND INTENSITY OF PERFORMANCE ANXIETY AMONG ELITE- AND NOVICE ATHLETES		ACE GENOTYPE MAY HAVE AN EFFECT ON SINGLE SET VS MULTIPLE SET PREFERENCE IN STRENGTH TRAINING	
* Ben Steyn, *Roelie Potgieter * <i>University of Pretoria</i>		* Muzaffer Çolakoğlu, ¹ F. Sırrı Çam, ² Bülent Kayıtkent, ² Fırat Çetinöz, ² Şule Çolakoğlu, ² Mustafa Türkmen, ² Metin Sayın * <i>Ege University Department of Physical Education and Sports</i> ¹ Celal Bayar University, Faculty of Med Dept. of Med. Biology and Genetics ² Celal Bayar University School of PE and Sports	
8:40-8:50	S002 Behavioral Sciences	8:40-8:50	S012 Behavioral Sciences
PERCEPTIONS OF PARENTS IN AN ETHICAL SITUATION: A CASE STUDY IN RSA SPORT		COMPARISON OF MOTIVATIONAL DIMENSIONS AND ANXIETY LEVELS WITH STRESS SIGNS OF FOOTBALL COACHES THROUGH THEIR SPORTS LIFE	
* Gerrie Van wyk, *Ben Steyn * <i>University of Pretoria</i>		* Asaf Özkar, Vesile Yılmaz, *Ziya Kuruç * <i>Hacettepe University, School of Sport Science and Technology</i>	
8:50-9:00	S003 Coaching	8:50-9:00	S013 Behavioral Sciences
COMMUNICATION, COHESION AND MENTORING OF COACH - ATHLETE RELATIONSHIP: ARE THEY IN TUNE?		TURKISH ADAPTATION OF A CHILDREN'S FORM OF THE COMPETITIVE STATE ANXIETY INVENTORY: CSAI-2C	
* Mohar Kassim * <i>Researcher, Loughborough University, United Kingdom</i>		* Ziya Kuruç, *Vesile Yılmaz * <i>Hacettepe University, School of Sport Science and Technology</i>	
9:00-9:10	S004 Behavioral Sciences	9:00-9:10	S14 Behavioral Sciences
DEMOCRATIC AND POSTMODERN VALUES IN SPORT AND PHYSICAL EDUCATION		AN INVESTIGATION OF RISK PERCEPTION AND RISK VIEWS OF MALE AND FEMALE UNIVERSITY STUDENTS BEFORE AND AFTER PARTICIPATING THE OUTDOOR ACTIVITIES EXPERIENCE	
* Nam ki Cho * <i>Sookmyung Womens Univ.</i>		* S. Cem Dinç, ¹ Canan Koca, ¹ Giyasettin Demirhan, ¹ Hülya Aşçı * <i>Hacettepe University, School of Sport Science and Technology</i> ¹ Başkent University, Department of Sport Science	
9:10-9:20	S005 Health and Sports	9:10-9:20	S015 Movements and Training
STUDY OF LOW-BACK PAIN AMONGST CYCLISTS		IS THE ACE DD GENOTYPE ASSOCIATED WITH A BETTER ENDURANCE PERFORMANCE?	
* Reza Rajabi * <i>Tehran University</i>		* F. Sırrı Çam, ¹ Muzaffer Çolakoğlu, ² Şule Çolakoğlu, ¹ Tolga Akşit, ¹ M. Zeki Özkol, ³ Afiğ Berdeli * <i>Celal Bayar University, Faculty of Medicine, Department of Medical Biology and Genetics.</i> ¹ Ege University, School of Physical Education and Sports ² Celal Bayar University, School of Physical Education and Sports ³ Ege University, Faculty of Medicine, Department of Pediatrics	
Hall C	Moderator: Caner Açıkada	Hall D	Moderator: Emin Ergen
8:30-8:40	S006 Health and Sports	9:30-9:40	S016 Sports Nutrition
C34T AMPD1 GENE POLYMORPHISM IN YOUNG ATHLETES		EVALUATION OF SOME HEMATHOLOGICAL OUTCOMES AND PERFORMANCE OF NUTRITION EDUCATION THAT WAS GIVEN TO ARCHERY TEAM IN SAMSUN DISTRICT	
* Olga Fedotovskaya, ¹ Irina Astratenkova, ¹ Victor Rogozkin * <i>Research Institute of Physical Culture</i>		* F. Elmacioğlu, ¹ S. A. Ağaoğlu, ¹ D. Günay Derebaşı, ² C. Asal * <i>Ondokuz Mayıs University, Faculty of Medicine, Department of Public Health</i> ¹ Ondokuz Mayıs University, Yaşar Doğu School of Physical Education and Sports ² School of Health Services	
8:40-8:50	S007 Health and Sports	9:40-9:50	S017 Movements and Training
ALFA-ACTININ-3 GENE POLYMORPHISM IN YOUNG ATHLETES		ACE GENE POLYMORPHISM, SINGLE AND MULTIPLE SET RESISTANCE TRAINING AND CHANGES IN LEAN SOFT TISSUE MASS	
* Anastasiya Druzhevskaya, ¹ Irina Astratenkova, ¹ Victor Rogozkin * <i>Research Institute of Physical Culture</i>		* Muzaffer Çolakoğlu, ¹ F. Sırrı Çam, ² Gürbüz Büyükyazı, ² Mustafa Türkmen, ² Fırat Çetinöz, ¹ M. Zeki Özkol, ³ Afiğ Berdeli * <i>Ege University, School of Physical Education and Sports</i> ¹ Celal Bayar University, Faculty of Medicine ² Celal Bayar University, School of Physical Education and Sports ³ Ege University, Faculty of Medicine	
8:50-9:00	S008 Management And Organization		
COMPETENCE RESEARCH IN SPORT MANAGEMENT			
* Kaiser Sebastian * <i>German Sport University Cologne - Institute of Sport Economics and -Sport Management</i>			
9:00-9:10	S009 Management And Organization		
NEW PUBLIC MANAGEMENT AND THE COMMUNITY SPORT DEPARTMENTS IN GERMANY. AN EMPIRICAL ANALYSIS OF EXTENT, TYPES AND SUCCESS OF MANAGEMENT REFORM			
* Schütte Norbert * <i>German Sport University Colon / German Students Sport Federation</i>			
9:10-9:20	S010 Movements and Training		
CHARACTERISTICS OF LOADS DURING COMPETITIVE ROWING			
* Bachev Vihren, ¹ Neykov svilen Svilen * <i>NSA, Theory of sport, Sofia, Bulgaria</i>			

9:50-10:00	S018	Health and Sports	14:10-14:20	S027	Health and Sports	16:
INFLUENCING FACTORS TO LIFE SATISFACTION OF ELDERLY LIVING IN NURSING HOMES			BODY KNOWLEDGE AND SOCIAL CONSIDER IN THE CONTROL OF BODY : SPORT LIVES OF WOMEN WEIGHTLIFTERS			COL
*Serap İnal, ¹ Feryal Subaşı, ² Serap Mungan Ay, ³ Selda Uzun, ¹ Mithat Kiyak, ¹ Tuğrul Erbaydar, ¹ Eda Şentürk, ¹ Tayfun Amman, ¹ Osman Hayran			* <u>Dr. Nefise Bulgu</u>			* Z
¹ Marmara University, School of Physical Education and Sports			¹ Hacettepe University Sport Science and Technology Department			Kal
¹ Marmara University, Faculty of Health Education						* Ş
10:00-10:10	S019	Health and Sports	14:20-14:30	S028	Movements and Training	16
THE EFFECTS OF SALIVARY IGA LEVELS ON SUSCEPTIBILITY OF UPPER RESPIRATORY TRACT INFECTION IN SWIMMERS			COMPARISON OF PHYSICAL ACTIVITY SCALES WITH Pedometer VALUES IN STUDENTS AT PHYSICAL EDUCATION AND SPORTS SCHOOLS			ME
* Armağan Arslan, ¹ İbrahim Halil Ural, ² Erdem Kaşıkçioğlu, ³ Berrin Topçu, ⁴ Sinem Eryılmaz, ⁵ Abidin Kayserilioğlu, ⁶ Safinaz Yıldız			* Selda Uzun, ¹ Filiz Çamlıgüney, ² Aysel Pehlivan, ³ Salih Pınar			* S
¹ Istanbul Medical Faculty Sports Medicine Department			¹ University of Marmara Physical Education and Sports, Istanbul			* S
¹ Istanbul Medical Faculty Physical Therapy and Rehab. Department						
10:10-10:20	S020	Sports Nutrition	14:30-14:40	S029	Physical Education	16
CUMULATIVE EFFECTS OF CONJUGATED LINOLEIC ACID AND EXERCISE ON BODY COMPOSITION, SERUM LIPID PROFILE, INSULIN, LEPTIN AND GLUCOSE LEVELS			THE EFFECT OF MOVEMENT EDUCATION PROGRAM IMPLEMENTED IN KINDERGARDEN ON HAND-EYE COORDINATION OF CHILDREN			DII
* Şule Çolakoğlu, ¹ Muzaffer Çolakoğlu, ² Fatma Taneli, ³ Firat Çetinöz, ⁴ Mustafa Türkmen, ⁵ Gülbin R. Nalçakan, ⁶ Tolga Akşit			* Nurper Ozbar, ¹ Fatma Kayapınar			* A
¹ Celal Bayar University, School of Physical Education and Sports.			¹ Marmara University			* S
¹ Ege University, School of Physical Education and Sports.						
² Celal Bayar University, Faculty of Med Dept of Clinical Biochemistry.						
Hall D		Moderator: Fehmi Tuncel	14:40-14:50	S030	Sports Nutrition	16
10:30-10:40	S021	Behavioral Sciences	THE EFFECT OF L-CARNITINE SUPPLEMENTATION DURING 10 DAYS ON 1500M RUNNING PERFORMANCE AND PLASMA LACTATE LEVEL			EV.
THE EFFECTS OF MOTIVATIONAL VARIABLES ON COGNITIVE STATE ANXIETY, SOMATIC STATE ANXIETY AND SELF-CONFIDENCE			* Mustafa Karahan, ¹ Bekir Çoksvim			SP
* Birol Doğan			¹ Niğde University, School of Physical Education and Sports.			* L
* Ege University Department of Physical Education and Sports			¹ Erciyes University			* O
10:40-10:50	S022	Movements and Training	14:50-15:00	S031	Research Methodology	8:
EVALUATION OF ARCHER'S SKILL: AN EMG STUDY			THE EVALUATION OF CANDIDATE DIVERS WHO ATTENDED TO İU İSTANBUL FACULTY OF MEDICINE, UNDERWATER AND HYPERBARIC MEDICINE DEPARTMENT IN YEAR 2002-2004			CO
* Abdullah Ruhi Soyulu, ¹ Hayri Ertan, ¹ Feza Korkusuz			* Savaş İlgezdi, ¹ Şermin Şengün, ² Şahin Özen			BY
* Hacettepe University School of Medicine, Biophysics Dep			* MED-OK The Center of Hyperbaric Oxygen Treatment, Istanbul			* N
¹ Middle East Technical University, Physical Education and Sports Dept.			¹ İU Istanbul Faculty of Medicine, Underwater and Hyperbaric Medicine Department, Istanbul.			* L
10:50-11:00	S023	Management And Organization	15:00-15:10	S032	Movements and Training	8:
A SURVEY TO DETERMINE THE ATTITUDES OF SPORTS JOURNALISTS AND REPORTERS IN REGARDS TO THE PRESENTATION OF VIOLENCE AND FAIR PLAY			EFFECTS OF CARBON DIOXIDE THERAPY ON PERFORMANCE PROFILES OF PENTATHLETE : A CASE STUDY			CO
* Recep Cengiz, ¹ İ. Fatih Yenel			* Taner Aydın, ¹ Yavuz Yıldız, ² Fatih Örs, ³ Tunç Alp Kalyon			* N
¹ Gazi University, School of Physical Education and Sports			* Department of Sports Medicine, Gülhane Military Medicine Academy			* L
11:00-11:10	S024	Movements and Training	¹ Department of Sports Medicine, Gülhane Military Medicine Academy, Ankara			8:
DISCRIMINATION OF WON AND LOST THE GAME IN FREE-STYLE WRESTLING			² Department of Radyology, Gülhane Military Medicine Academy, Ankara			CO
* Alper Aşçı, ¹ Ümid Karlı, ² Halit Harmancı, ³ Caner Açıkada			³ Department of Physical Therapy and Rehabilitation, Gülhane Military Medicine Academy, Ankara			* N
* Hacettepe University, School of Sport Science and Technology						* L
11:10-11:20	S025	Behavioral Sciences	15:10-15:20	S033	Sports Nutrition	9:
LICENSED MERCHANDISE BUYING BEHAVIOR: A RESEARCH ON PERSONS SHOPPING IN FENERIUM STORE			EFFECT OF VITAMIN C SUPPLEMENTATION ON SERUM IRON LEVEL AND TOTAL IRON BINDING CAPACITY OF WRESTLERS			IN
* Metin Arğan			* Cengiz Arslan, ¹ Bilge Gönül, ² Sibel Dinçer, ³ Birsen Kaplan, ⁴ Cemal Çevik			TR
* Anadolu University			* Fırat University, School of Physical Education and Sports			* S
Hall D		Moderator: Ferit Acar	¹ Gazi University, Faculty of Medicine, Department of Physiology			* A
14:00-14:10	S026	Health and Sports	² Başkent University, Faculty of Medicine, Department of Physiology			* L
THE EFFECT OF TWO DIFFERENT ELECTRICAL STIMULATION ON LACTIC ACID ACCUMULATION IN HEALTHY SUBJECTS			³ Gazi University, Faculty of Medicine, Department of Biomechanics			* Y
* Zühal Gültekin, ¹ Ayşe Kin İşler, ² Özgür Sürenkök, ³ Nuray Kırdı						* C
¹ Başkent University Department of Physical Therapy and Rehabilitation			Hall D		Moderator: Gül Tiryaki	9:
¹ Baskent University Department of Sport Sciences			16:00-16:10	S034	Health and Sports	PT
² Baskent University Vocational School of Health Sciences Hydrotherapy			DETERMINATION OF PHYSICAL FITNESS LEVEL OF HEALTHY FEMALES AGED 65-75 YEARS			W
³ Hacettepe University School of Physical Therapy and Rehabilitation			* Selami Yüksek, ¹ İbrahim Cicioğlu			GI
			¹ Gazi University, School of Physical Education and Sports			* S

- ts** 16:10-16:20 **S035** **Movements and Training**
CORRELATION AND COMPARISON OF MEAN RUNNING VELOCITIES AT FIXED BLOOD LACTATE LEVELS AND PERFORMANCE OF CHILDREN
* Zambak Şahin, *Alper Aslan, *Mehmet Kale, *Manolya Küçüker, *Ümid Karlı, *Arda Keskin, *İlker Kireker, *Filiz May, *Nigar Sirek, *Caner Açıkada
* School Sport Sciences and Technology, Hacettepe University, Ankara
- ng** 16:20-16:30 **S036** **Movements and Training**
METABOLIC DIFFERENCES IN RESPONSE TO VARIOUS EXERCISE INTENSITIES
* Sinem Mavili, *Tahir Hazır, *Alper Aşçı, *Caner Açıkada
* School of Sport Science and Technology, Hacettepe University
- on** 16:30-16:40 **S037** **Movements and Training**
DIFFERENCES AT LACTATE DYNAMICS OF THE RUNNING VELOCITY AT DURING FIXED INTENSITY EXERCISE TEST
* Arda Keskin, *Zambak Şahin, *Sinem Mavili, *Tahir Hazır, *Caner Açıkada
* School of Sport Science and Technology, Hacettepe University
- on** 16:40-16:50 **S038** **Behavioral Sciences**
EVALUATION OF SPORTSMEN'S VIEW AND ATTITUDE TOWARDS VIOLENCE IN SPORTS
* Leyla Tavacıoğlu, *Kaan Kora, *Hülya Yeltepe,
*Oya Erkut Atılğan
* Istanbul Technical University
* Marmara University

- 16:50-17:00 **S039** **Physical Education**
INVESTIGATION OF SERUM NITRIC OXIDE, LACTIC ACID AND FEMORAL BLOOD FLOW AFTER SUPRAMAXIMAL EXERCISE
* Hilmi Karatosun
* SDU, Department of Sports Medicine
- 17:00-17:10 **S040** **Management And Organization**
COMPARISON OF MEMBERS' EXPECTATIONS AND PERCEPTIONS OF SERVICE QUALITY IN HEALTH-FITNESS CLUBS WITH RESPECT TO DEMOGRAPHIC VARIABLES
* Bülent Gürbüz, *Settar Koçak, *Eddie T. C. Lam
* Baskent University, Department of Sport Sciences
* METU, Physical Education and Sport Department
* Department of HPERD, Cleveland State University, Ohio, United States
- 17:10-17:20 **S041** **Movements and Training**
A STUDY ON THE RELATIONSHIP BETWEEN PHYSICAL FITNESS PARAMETERS IN 11-12 YEAR-OLD GIRLS
* Emine Kutlay, *Ercan Haslofça, *Fehime Haslofça
* Ege University Department of Physical Education and Sports

20.11.2004

- Hall A** Moderator: Hakan Gür
- 8:30-8:40 **S042** **Movements and Training**
COMPARISON OF THE STANDARD AND THE EXTRAPOLATED DLT METHODS: BY USING TWO DIFFERENT SIZES OF CONTROL FRAME
* Murat Çilli, *Serdar Arıtan
* Institute of Health Sciences
* Hacettepe University, School of Sport Sciences and Technology, Biomech
- 8:40-8:50 **S043** **Physical Education**
CORPORAL PUNISHMENT IN TURKISH SPORT
* Nimet Haşıl Korkmaz
* Uludağ University
- 8:50-9:00 **S044** **Physical Education**
DETERMINATION OF THE RELATIONS BETWEEN PHYSICAL EDUCATION TEACHERS AND MUNICIPALITIES IN TERMS OF SPORT SERVICES
* Bilal Çoban, *Sebahattin Devocioğlu,
*Muhammet Düşükcan
* Firat University, School of Physical Education and Sports
* Firat University, School of Social Science
- 9:00-9:10 **S045** **Health and Sports**
INTRAOCULAR PRESSURE CHANGES DURING SUBMAXIMAL STRENGTH TRAINING
* Salih Pınar, *Banu Öncel, *Murat Öncel, *Bülent Hatip
* Marmara University, School of Physical Education and Sports
* Dünya Eye Hospital
* Yeditepe University, Faculty of Medicine
* Coliseum Sports Center
- 9:10-9:20 **S046** **Physical Education**
PHYSICAL ACTIVITY AND SPORTS BEHAVIOUR OF MUSLIM GIRLS AND YOUNG WOMEN IN GERMANY A COMPARATIVE ANALYSIS OF GERMAN AND MUSLIM GIRLS AND YOUNG WOMEN
* Seyhan Hasırcı, *Sabine Seidenstücker
* Uni Landau Sportwissenschaft Institut

- Hall D** Moderator: Gazanfer Doğu
- 8:30-8:40 **S047** **Behavioral Sciences**
MOTIVATIONAL TYPES AND COMPETENCE LEVELS OF FEMALE AND MALE ATHLETES
* F. Zişan Kazak
* Ege University, School of Physical Education and Sports
- 8:40-8:50 **S048** **Sports Nutrition**
NUTRITIONAL STATUS OF TURKISH NATIONAL TEAM KARATE ATHLETES
* Aysel Pehlivan, *Gülcihan Ustaoglu, *Filiz Çamlıgüney
* Marmara University, School of Physical Education and Sports
- 8:50-9:00 **S049** **Health and Sports**
THE PREVALENCE OF FEMALE ATHELETE TRIAD
* Selma Arzu Vardar, *Erdal Vardar, *Cem Kurt,
*Gülşay Durmuş Altun, *Levent Öztürk
* Trakya University Medical Faculty Department of Physiology
* Trakya University Faculty of Medicine Department of Psychiatry
* Trakya University Physical Education and Sport Department
* Trakya University Faculty of Medicine Department of Nuclear Medicine
- 9:00-9:10 **S050** **Behavioral Sciences**
RELIABILITY AND VALIDITY OF "SOCIAL PHYSIQUE ANXIETY SCALE"
* Özgür Mülazımoğlu Ballı, *F. Hülya Aşçı
* METU, Physical Education and Sport Department
* Başkent University, Department of Sport Sciences
- 9:10-9:20 **S051** **Adapted PE**
THE EFFECTS OF GOALBALL GAME AND MOVEMENT TRAINING ON THE ANXIETY TRAITS OF VISUALLY IMPAIRED CHILDREN
* Erkan Çalışkan, *Cengiz Karagözoğlu, *Fatma Kayapınar, *Mustafa Said Erzeybek, *Bülent Fişekçioğlu
* Atatürk University
* Marmara University, School of Physical Education and Sports
* Marmara University Institute of Health Sciences
* Selçuk University, School of Physical Education and Sports

Hall D Moderator: Gıyasettin Demirhan
10:00-10:10 **S052** **Physical Education**
ANALYSIS OF PHYSICAL EDUCATION TEACHERS QUESTIONING SKILLS IN TEACHING
* M. Levent İnce, Şeref Çicek
* *Middle East Technical University, Physical Education and Sports Department*

10:10-10:20 **S053** **Physical Education**
EFFECT OF PHYSICAL EDUCATION PROGRAM ON MOTOR SKILL PERFORMANCE OF SIX YEARS OLD PRESCHOOL CHILDREN
* Zeki Dursun, *Gıyasettin Demirhan
* *Hacettepe University, School of Sport Sciences and Technology*

10:20-10:30 **S054** **Movements and Training**
RELIABILITY OF 5M MULTIPLE SHUTTLE RUN TEST AND ITS RELATION TO REPEATED WINGATE TEST
* Şenay Akın, *S. Nazan Koşar, *A. Haydar Demirel
* *Hacettepe University School of Sports Sciences and Technology*
* *Hacettepe University, Department of Sports Medicine*

10:30-10:40 **S055** **Behavioral Sciences**
THE APPROACHES OF PROFESSIONAL AND AMATEUR FOOTBALLERS ON THE UNFAIR BEHAVIORS DURING THE MATCH
* Gülfem Sezen, *İbrahim Yıldırım
* *Gazi University, School of Physical Education and Sports*

10:40-10:50 **S056** **Health and Sports**
ENDOTHELIAL FUNCTION AND EXERCISE CAPACITY IN ATHLETES
* Erdem Kaşıkçıoğlu, *Armağan Arslan, *Berrin Topçu, *Hüseyin Oflaz,
*İbrahim Ural, *Safinaz Yıldız,
*Abidin Kayserilioğlu
* *Istanbul University*
* *Istanbul Faculty of Medicine, Sports Medicine Department*
* *Istanbul Faculty of Medicine, Cardiology Department*
* *Istanbul Faculty of Medicine, Physical Therapy Department*

Hall D Moderator: Ziya Kuruç
11:00-11:10 **S057** **Movements and Training**
THE EFFECTS OF THE 2 MONTHS SWIMMING TRAINING ON THE BLOOD LACTIC ACID OF CHILDREN SWIMMERS
* Seydi Ahmet Ağaoğlu, *Tülin Atan, *Erkut Tutkun,
*Yalçın Taşmektepligil
* *Öndokuz Mayıs University, Yaşar Doğu School of Physical Education and Sports*

11:10-11:20 **S058** **Movements and Training**
THE COMPARISON OF SWIMMING TRAINING AND PHYSICAL EDUCATION TRAINING IN DEVELOPMENT OF THE CHILDREN WITH DOWN SYNDROME
* F. Camlıgüney, B. Sirmen
* *Marmara University, School of Physical Education and Sports, İstanbul*

11:20-11:30 **S059** **Movements and Training**
METABOLIC AND MAXIMAL EXERCISE TEST RESULTS OF TURKISH PROFESSIONAL SOCCER PLAYERS -A COMPARISON OF THE SEASONS 1990-1991 AND 2002-2003
* ¹ Mehmet Ünal, ²Türker Şahinkaya, ³Deniz Namaraslı
* *Istanbul University*
* *Medical Department of Istanbulspor Club*
* *Istanbul University, Medical Faculty of Istanbul, Department of Sports*
* *Orthosport Medical Center*

11:30-11:40 **S060** **Health and Sports**
THE EFFECTS OF EVENT RELATED DIFFERENCES AND AGE ON ANAEROBIC POWER AND CAPACITY IN TRAINED CHILDREN
* Alpay Güvenç, *Tahir Hazır, *Ümid Karlı, *Alper Aslan, *Caner Açıkada
* *Hacettepe University, School of Sport Science and Technology*
* *School of Sport Sciences and Technology, Hacettepe University*

11:40-11:50 **S061** **Technology**
KINEMATIC ANALYSIS OF OVERARM THROWS IN HANDBALL PLAYERS OF DIFFERENT LEVELS
* Selçuk Akpınar, *Nevzat Mirzeoğlu
* *Abant İzzet Baysal University*

Hall C Moderator: Turgay Biçer
13:00-13:10 **S062** **Health and Sports**
SWIMMING FOR ALL
* Hashem Koozechian
* *Tarbiat Modarres University*

13:10-13:20 **S063** **Physical Education**
THE CONTEMPORARY ERA, CHARACTER AND NATURE OF SPORT
* Jovanka Kepeska
* *Faculty of Philosophy, Skopje, Republic of Macedonia*

13:20-13:30 **S064** **Physical Education**
MOTIVATION & MOVEMENT THROUGH THE USE OF PEDOMETERS
* Michael Cordier, *Hemming Atterbom
* *Walk4Life, Inc 12137 Rhea Drive, Unit B Plainfield, IL.*
* *Valdosta State University*

13:30-13:40 **S065** **Physical Education**
MOTIVATING ASPECTS OF THE PUPILS IN THE PHYSICAL EDUCATION
* Agron Cuka, Ylli Zhurd

13:40-13:50 **S066** **Physical Education**
GRADING IN PHYSICAL EDUCATION: 7TH AND 8TH GRADE STUDENTS' POINTS OF VIEW
* József Bognár, *Balázs Fügedi, *László Kovács t.,
*Csilla Suskovic, *Zsolt Katona, *Tamás Ulrik, *László Tóth, *Marina i Salvara
* *Semmelweis University, Faculty of Physical Education and Sport Sciences (TF)*
* *Eger University*
* *Baja University*
* *Kaposvár University*
* *Szeged University*
* *Kecskemét University*
* *Semmelweis University - TF, Budapest*
* *University of Athens*

Hall C Moderator: Ümit Kesim
14:00-14:10 **S067** **Physical Education**
THE INFLUENCE OF DIFFERENT TEACHING STYLES ON PUPILS' GOAL ORIENTATIONS IN PHYSICAL EDUCATION
* Marina Salvara, *Jozsef Bognar
* *National and Kapodistrian University of Athens, Maraslio*
* *Semmelweis University, Faculty of PE and Sport Sciences*

14:10-14:20 **S068** **Behavioral Sciences**
THE EFFECT OF SOCIAL STRESS ON PERFORMANCE LEVEL OF ATHLETES IN EGYPTIAN NATIONAL TEAM OF GYMNASTIC
* Mohamed Abd el Menaem El Shafaey, * Moustafa Hussein Bahy
* *Minia University*

14:20-14:30 **S069** **Management And Organization**
QUANTITATIVE ASPECTS OF HUMAN RESOURCES IN SPORTS MANAGEMENT
* Habib Honari, *Mahmoud Goudarzi
* *Allame Tabatabaei University, Tehran University*

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- 14:30-14:40 **S070** **Physical Education**
HOW HUNGARIAN PRIMARY SCHOOL STUDENTS ACQUIRE THE GOALS OF PHYSICAL EDUCATION
 * Gyöngyvér Lacza, ¹Balázs Fügedi, ²Csilla Suskovic,
³László Kovács T., ⁴Tamás Ulrik, ⁵Zsolt Katona, ⁶József Bognár
 * *Semmelweis University Faculty of Physical Education, Budapest, Hungary*
¹ University of Eger
² University of Kaposvár
³ University of Baja
⁴ University of Kecskemét
⁵ University of Szeged
⁶ Semmelweis University Faculty of Physical Education, Budapest, Hungary
- 14:40-14:50 **S071** **Health and Sports**
THE ROLE OF SOCIAL PRIORITIES IN THE DIRECTION OF SPORT STRATEGIES
 * Farzad Ghafouri, ¹Hossein Rahman Seresht,
²Hashem Koozechian, ³Mohammad Ehsani,
⁴Ezzatollah Shah Mansouri,
 * *Physical Education Dept. Allameh Tabatabaee University, Tehran Iran*
¹ Management Dept., Allameh Tabatabaee University, Tehran Iran
² Physical Education Dept., Tarbiat Modarres University, Tehran Iran
³ Physical Education Dept, Tarbiat Modarres University, Tehran Iran
⁴ Islamic Azad University, Arak Iran
- Hall D Moderator: Haydar Demirel
 13:00-13:10 **S072** **Technology**
EXPERIMENTAL ANALYSIS OF CRAWL STROKE SWIMMING
 * Tolga Akış, ¹Yusuf Orçan, ¹Ahmet N. Eraslan
 * *Atılım University*
¹ Department of Engineering Sciences, Middle East Technical University
- 13:10-13:20 **S073** **Movements and Training**
A COMPARISON OF THE ANTHROPOMETRIC AND PHYSIOLOGIC CHARACTERISTICS OF TURKISH ELIT AND NON ELIT SPORT CLIMBERS
 * Şerife Vatansever, ¹Gül Tiryaki Sönmez, ²Güçlü Özen
 * *Abant İzzet Baysal University*
- 13:20-13:30 **S074** **Behavioral Sciences**
TURKISH ADAPTATION OF A CHILDREN'S FORM OF THE SPORT COMPETITION ANXIETY TEST: SCAT-C
 * Ziya Kuruç, ¹Vesile Yılmaz
 * *Hacettepe University, School of Sport Science and Technology*
- 13:30-13:40 **S075** **Movements and Training**
COMPETITION ANALYSIS OF 35. WORLD FREE-STYLE WRESTLING CHAMPIONSHIP
 * Osman İmamoğlu, ¹Mehmet Türkmen
 * *Ondokuz Mayıs University, School of Physical Education and Sports*
- 13:40-13:50 **S076** **Adapted PE**
THE COMPARISON OF SPORTMEN BLINDS STATIC AND DYNAMIC BALANCE ACTIVITIES WHO ARE BETWEEN 13-15 AGE GROUPS
 * Atilla Pulur, ¹Mustafa Kaya
 * *Gazi University, School of Physical Education and Sports*
¹ Erciyes University, School of Physical Education and Sports
- Hall D Moderator: Kamil Özer
 14:00-14:10 **S077** **Movements and Training**
COMPETITION ANALYSIS OF 46. WORLD GRECO-ROMAN WRESTLING CHAMPIONSHIP
 * Mehmet Türkmen, ¹Osman İmamoğlu,
¹Mehmet Akif Ziyagil
 * *Ondokuz University, School of Physical Education and Sports*
- 14:10-14:20 **S078** **Management And Organization**
ORGANIZATIONAL COMMITMENT OF PHYSICAL EDUCATION TEACHERS
 * H. Birol Yalçın, ¹Hanifi Uzum, ²Bekir Yüқтаşır
 * *Abant İzzet Baysal University*
- 14:20-14:30 **S079** **Movements and Training**
EFFECTS OF EXTERNAL AND SELF-CONTROLLED FEEDBACK SCHEDULE ON RETENTION OF ANTICIPATION TIMING
 * Güler Arsal, ¹Sadettin Kirazcı
 * *METU, Physical Education and Sports Department, Ankara*
- 14:30-14:40 **S080** **Health and Sports**
METABOLIC RESPONSES TO A PNF EXERCISE
 * Zuhâl Gültekin, ¹Ayşe Kin İşler, ²Özgür Sürenkök
 * *Başkent University, Department of Physical Therapy and Rehabilitation*
¹ Başkent University Department of Sport Sciences
² Başkent University School of Hydrotherapy
- 14:40-14:50 **S081** **Health and Sports**
A REGRESSION EQUATION TO PREDICT TRUE VO2 MAX USING A FIELD TEST (20 METER SHUTTLE RUN)
 * Metin Lütüfî Baydar, ¹Cem Çetin, ¹Hilmi Karatosun,
¹Kaan Coşarcan
 * *S. Demirel University*
¹ S. Demirel University Faculty of Medicine, Sports Medicine Department
- 14:50-15:00 **S082** **Health and Sports**
THE EVALUATION OF THE IMPACT OF SOCIO-ECONOMIC LEVEL OVER THE, HEALTH-RELATED PHYSICAL FITNESS OF GIRLS
 * Dursun Güler, ¹Şükrü Serdar Balci, ¹Filiz Çolakoğlu,
²Selma Karacan
 * *SDU Burdur Faculty of Education, Department of Physical Education and Sports*
¹ GU University, School of Physical Education and Sports
² SU University, School of Physical Education and Sports
- 15:00-15:10 **S083** **Health and Sports**
EFFECTS OF HIGH ALTITUDE CLIMBING ON SOME PHYSIOLOGICAL PARAMETERS
 * Şerife Vatansever, ¹Güçlü Özen, ²Gül Tiryaki Sönmez
 * *Abant İzzet Baysal University*

POSTER PRESENTATIONS

program

18.11.2004

Time	Group	Moderator	Topic	Discipline
10:30-11:00	Group A	Moderator: Serap İnal		
P001			Adapted PE THE IDENTIFICATION OF MAIN SPORTS BRANCHIES TO ORIENT PEOPLE TOWARDS SPORTS AND THE EVOLUTIN OF SPORTS POSSIBILITIES THE EXAMPLE OF KÜTAHYA * Ertuğrul Bulut, *Muharrem Önver * Ministry of Education, Teacher of Physical Education	
P002			Adapted PE THE EFFECTS OF GOALBALL GAME AND MOVEMENT TRAINING ON THE PHYSICAL FITNESS OF VISUALLY IMPAIRED CHILDREN * Erkan Çalışkan, *Aysel Pehlivan, *Serap İnal, *Sedat Akar, *Şenol Dane * Atatürk University, School of Physical Education and Sports * Marmara University, School of Physical Education and Sports * Atatürk University, Faculty of Medicine, Department of Physiology	
P003			Adapted PE HABITUAL PHYSICAL ACTIVITY IN VISUAL HANDICAPPED CHILDREN DURING SCHOOL AND FREE DAYS * Ummuhan Baş Aslan, *Ali Kitiş, *Şehmus Aslan, *Bilge Çalık * Pamukkale University * Pamukkale University School of Physical Therapy and Rehabilitation * Pamukkale University School of Sport Scinces and Technology	
P004			Adapted PE APPLICATION OF PE TEACHERS' JOB EXPERIENCE TO DISABLED SCHOOLS * Kenan Sivrikaya, *Nalan Şık, *Fehmi Çalık, *Mahmut Kahveci * Kocaeli University, School of Physical Education and Sports, Department of Recreation * Sakarya University, Institute of Social Sciences, Academy of Physical Education and Sports	
P005			Adapted PE EVALUATION OF WHEELCHAIR BASKETBALL PLAYERS IN REGARD TO TRAINING CHARACTERISTICS * Yasar Tatar, *Selda Uzun * Marmara University, School of Physical Education and Sports	
P006			Adapted PE COMPARISON OF THE BEFORE AND AFTER EXERCISE MOTORIC PERFORMANCES OF THE MENTAL DISABLED CHILDREN * Özgür Aygün, *Canan Dinçer Albayrak * Sakarya Merkez Kanada Practice School, Teacher of Physical Education * Sakarya University, School of Physical Education and Sports	
15:00-15:30	Group A	Moderator: Turgay Biçer		
P010			Behavioral Sciences MOUNTAIN SKIING IN OLD TURKISH ETHNIC TRIBES AND STATES * Hüseyin Salman * Marmara University Arts and Science Faculty	
P011			Behavioral Sciences A STUDY ON THE SOCIO-ECONOMIC CONDITIONS OF ELITE ATHLETES IN TURKEY * Hacı Ahmet Pekel, *Latif Aydos, *Mansur Onay * Gazi University, School of Physical Education and Sports	
P012			Behavioral Sciences COMPARISON OF PRE-COMPETITION AND POST-COMPETITION ANXIETY LEVELS OF VOLLEYBALL PLAYERS * Vesile Yılmaz, *Ziya Kuruç, *Zeycan Acar * Hacettepe University, School of Sport Sciences and Technology * Volleyball Coach	
P013			Behavioral Sciences COMPARISON OF SELF-ESTEEM LEVEL IN FEMALE AND MALE ATHLETES * K. Alparslan Erman, A. Şahan, S. Can * Akdeniz University, School of Physical Education and Sports	
P014			Behavioral Sciences THE DEMOGRAPHIC PROPERTIES OF THE SPORTSMEN IN 8-12 AGE GROUP, THEIR THOUGHTS ON ATHLETISM AND THEIR MOTIVATIONS * İlhan Ağırbaş, *Yetkin Utku Kamuk, *Bülent Arslantaş * Marmara University	
P015			Behavioral Sciences ATTITUDES OF TURKISH UNIVERSITY STUDENTS TOWARD OBESITY: GENDER AND SPORT PARTICIPATION COMPARISON * Ayşe Kin İşler, *Settar Koçak * Başkent University, Department of Sport Sciences * METU, Department of Physical Education and Sports	
15:00-15:30	Group B	Moderator: Gazanfer Doğu		
P028			Behavioral Sciences AN INVESTIGATION OF TURKISH SOCCER REFEREES' DECISIONS TO COMMENCE THEIR OCCUPATION * Melih Balyan, *Timuçin Gençer * Ege University Department of Physical Education and Sports * Marmara University Department of Physical Education and Sport	
P029			Behavioral Sciences COMPARISON OF SPORT RELATED ACHIEVEMENT MOTIVE IN FEMALE AND MALE ATHLETES * K. Alparslan Erman, A. Şahan, S. Can * Akdeniz University	
P030			Behavioral Sciences THE RELATIONSHIP BETWEEN PRE-COMPETITIVE STATE ANXIETY AND PERFORMANCE OF TAEKWONDO ATHLETES * Cem Çetin, *Metin Lütfi Baydar, *Mustafa Çetin * Süleyman Demirel University, Department of Sports Medicine	
P031			Behavioral Sciences RESEARCH ABOUT THE FACTORS OF AMATEUR AND PROFESSIONAL FOOTBALL PLAYERS BEING AFFECTED FROM THE SPECTATORS * Cengiz Arslan, *Fikret Ramazanoğlu, *Eyüp Yıldırım, *M.Fatih Karahüseyinoğlu * Fırat University School of Physical Education and Sports * Marmara University School of Physical Education and Sports	
P032			Behavioral Sciences THE COMPARISON OF EXPECTATIONS AND SOSIO- CULTURAL CHARACTERISTICS OF HORSE RACE SPECTATORS * Cengiz Karagözoğlu, *Gökhan Çetinkaya * Marmara University, School of Physical Education and Sports	

P033 Behavioral Sciences**THE EFFECT OF SOCIAL STRESS ON PERFORMANCE LEVEL OF ATHLETES IN EGYPTIAN NATIONAL TEAM OF GYMNASTIC**

Mohamed Abd el Menaem El Shafaey, Moustafa Hussein Bahy
Minia University

15:00-15:30

Group C

Moderator: Şefik Tiryaki

P034 Behavioral Sciences**FACTORS WHICH ARE AFFECTING THE PARTICIPATION OF MUĞLA UNIVERSITY STUDENTS IN LEISURE TIME ACTIVITIES**

* Kenan Sivrikaya, ¹Murat Ehlüzöğlü, ¹Fehmi Çalık, ³Erdal Zorba,
²Mahmut Kahveci
* Kocaeli University, School of Physical Education and Sports, Department of Recreation

¹ Sakarya University, Institute of Social Sciences, Academy of Physical Education and Sports

² Kocaeli University, School of Physical Education and Sports

³ Muğla University, School of Physical Education and Sports

P035 Behavioral Sciences**INVESTIGATION OF STATE ANXIETY LEVEL OF GREASED WRESTLER**

* Özgür Özdemir
* Akdeniz University, School of Physical Education and Sports

P036 Behavioral Sciences**CHEERLEADERS' SOCIO-CULTURAL BACKGROUND AND THEIR INFLUENCES ON THE FOOTBALL SPECTATORS IN TURKEY**

* Mehmet Acet, Veysel Küçük

P037 Behavioral Sciences**KNOWLEDGE AND ATTITUDES OF WRESTLERS REGARDING MENTAL TRAINING**

* İbrahim Şahin, *Emin Süel, ¹Figen Çiloğlu, ²Rifat Demir
* Marmara University, School of Physical Education and Sports

¹ GENLAB

² Niğde University, School of Physical Education and Sports

P038 Behavioral Sciences**THE LEADERSHIP BEHAVIOR AND ITS RELATION TO JOB SATISFACTION AMONG UNIVERSITY YOUTH – CARE OFFICIALS**

* Mohmed Fawzy
* Faculty of Physical Education Egypt

P039 Behavioral Sciences**CHAMPION PHYSICIANS**

* Ahmet Doğan Ataman

15:00-15:30

Group D

Moderator: Seref Çiçek

P046 Behavioral Sciences**A COMPARISON OF EATING ATTITUDES AND PHYSICAL ACTIVITY LEVELS OF UNIVERSITY STUDENTS WITH REGARD TO SOCIAL PHYSIQUE ANXIETY**

* F. Hülya Aşçı, ¹Macide Tüzün, *Canan Koca
* Başkent University Sport Sciences Department
¹ METU, Physical Education & Sport Department

P047 Behavioral Sciences**ANALYSIS OF PHYSICAL AND NON-PHYSICAL ASSAULTS TOWARDS BASKETBALL REFEREES ACCORDING THEIR GENDER DIFFERENCES IN TURKEY**

* Rıdvan Ekmekçi, *Selhan Özbey Alkurt
* Abant İzzet Baysal University, Institute of Social Sciences

P048 Behavioral Sciences**MOTIVATIONAL ORIENTATION OF PROFESSIONAL AND AMATEUR SOCCER PLAYERS**

* Atahan Altıntaş, *Deniz Taylan Akşirin, *F. Hülya Aşçı
* Başkent University Sport Sciences Department

P049 Behavioral Sciences**BODY RELATED PERCEPTION OF EXERCISERS AND NON-EXERCISERS**

* Özgür Mülazimoğlu Ballı, ¹F. Hülya Aşçı
* METU, Physical Education and Sport Department
¹ Başkent University Sport Sciences Department

P050 Behavioral Sciences**STEP DANCE, BODY IMAGE SATISFACTION AND PHYSICAL SELF-PERCEPTION**

* F. Hülya Aşçı, ¹Özgür Mülazimoğlu Ballı
* Başkent University Sport Sciences Department
¹ METU, Physical Education & Sport Department

P051 Behavioral Sciences**COMPARISON OF ANXIETY LEVELS PRE-COMPETITIVE AND POST-COMPETITIVE PERFORMANCE**

* Vesile Yılmaz, *Ziya Kuruç
* Hacettepe University, School of Sport Sciences and Technology

10:30-11:00

Group G

Moderator: Haydar Demirel

P065 Health and Sports**CIGARETTE SMOKING PREVALANCE IN UNIVERSITY STUDENTS DENİZLİ- 2003**

* Nihat Gündüz, *Şehmus Aslan, ¹Ummuhan Baş Aslan, *Bülent Şenkibar
* Pamukkale University School of Sports Science and Technology
¹ Pamukkale University School of Physical Therapy and Rehabilitation

P066 Health and Sports**EFFECTS OF THE WALKING AND STEP AEROBIC EXERCISES PROGRAMS ON PHYSICAL FITNESS IN OBESE WOMEN**

* Hülya Akdur, ¹Zerrin Yiğit, *Nadiye Balota
* Istanbul University School of Physical Education and Sport
¹ Istanbul University, Cardiology Institute

P067 Health and Sports**THE VALIDITY AND RELIABILITY OF REGULATING EXERCISE INTENSITY BY BORG'S SCALE IN STEP DANCE SESSIONS**

* Ali Özkan, *Ayşe Kin İşler
* Başkent University, Department of Sport Sciences

P068 Health and Sports**THE EVALUATION OF THE RELIATIONSHIP BETWEEN THE SOMATOTYPE COMPONENTS WITH HEALTH-RELATED PHYSICAL FITNESS PARAMETERS IN GIRLS**

* Şükrü Serdar Balcı, ¹Dursun Güler, ²Selma Karacan, ³Filiz Çolakoğlu
* Gazi University, School of Physical Education and Sport
¹ S.D.U. Faculty of Education, Department of Physical Education and Sport
² S.U. University, School of Physical Education and Sport
³ G.U. University, School of Physical Education and Sport

P069 Health and Sports**CHANGES IN BODY TEMPERATURE BEFORE AND AFTER HEAT ACCLIMATION IN HUMANS**

* Masami Hirashita, ¹Osamu Shido, ²Koji Abe, ³Yoko Kajiwara, ⁴Saburo Yokokura
* Department of Social Welfare, Kinjo University, Japan
¹ Department of Environmental Physiology, School of Medicine, Shimane University, Japan
² Division of Information and Computer Science, Kanazawa Institute of Technology, Japan
³ The Faculty of Education, Bunkyo University, Japan
⁴ Material Science Research Center, Meisei University, Japan

10:30-11:00

Group H

Moderator: Emin Ergen

P081 Health and Sports**GENDER DIFFERENCES IN CONSTITUTIONAL AND PHYSICAL FITNESS CHARACTERISTICS OF ELEMENTARY SCHOOL STUDENTS**

* Dilara F. Özer
* Akdeniz University, School Of Physical Education And Sport

P082	Health and Sports	P107	Management and Organization	P12
COMPARISON OF CONSTITUTIONAL AND PHYSICAL FITNESS CHARACTERISTICS OF ELEMENTARY SCHOOL STUDENTS ACCORDING TO THEIR SOCIO-ECONOMIC STATUS		RECREATIONAL ENTERTAINMENT AND GAMES CONCEPTS OF COMMUNITIES LIVING IN TURKEY WITH DIFFERENT CULTURES		PAR
* Abdurrahman Aktop * Akdeniz University, School Of Physical Education And Sport		* Aylin Onsu * Kocaeli University, School of Physical Education and Sports		* Ha * Ga
P083	Health and Sports	15:00-15:30	Group F	Moderator: Velittin Balcı
THE EFFECTS OF STRENGTHENING TRAINING OF QUADRICEPS MUSCLE TO PHYSICAL FITNESS TESTS		P114	Management and Organization	P12
* Zuhâl Gültekin, ¹ Özgür Sürenkök, ² Gülnur Albayrak, ² Arzu Daşkapan, ² Sevgi Sarpel, ³ Nuray Kırdı * Faculty of Health Sciences Physical Therapy and Rehabilitation ¹ Başkent University Vocational School of Health Sciences ² Başkent University Faculty of Health Sciences Physical Therapy and Rehabilitation ³ Hacettepe University Physical Therapy and Rehabilitation		THE EVALUATION OF PERFORMANCE POINTS PREPARED BY NATIONAL SPORTS PRESS ABOUT FENERBAHÇE, GALATASARAY AND BEŞİKTAŞ IN 2003-2004 SOCCER SEASON		USI
* Mehmet Kale, *Zambak Şahin, *Manolya Küçükler, *Sinem Mavili, *Sultan Harbili, *Tahir Hazır, *Alper Aşçı, *Caner Açıka * School of Sport Science and Technology, Hacettepe University		* Ramazan Baştürk * Pamukkale University		*Eyl *Erk *Fit *Ma
P084	Health and Sports	P115	Management and Organization	10
CORRELATION OF VELOCITY, ANTHROPOMETRIC AND STRENGTH PARAMETERS IN TRAINED CHILDREN		SOCIAL FUNCTION OF SPORT CLUBS AS A CIVILIAN SOCIAL ORGANIZATIONS		P13
* Mehmet Kale, *Zambak Şahin, *Manolya Küçükler, *Sinem Mavili, *Sultan Harbili, *Tahir Hazır, *Alper Aşçı, *Caner Açıka * School of Sport Science and Technology, Hacettepe University		* Sebahattin Devocioğlu, *Bilal Çoban * Fırat University, School of Physical Education and Sports		TO (
P085	Health and Sports	P116	Management and Organization	OF 1
PREVALANCE OF RECOMMENDED LEVEL FOR VIGOROUS AND MODERATE PHYSICAL ACTIVITY AT PRIMARY SCHOOL, HIGH SCHOOL AND UNIVERSITY		INVESTIGATION OF THE REFEREES UPON LAW KNOWLEDGES IN TURKEY PROFESSIONAL LEAGUE		* Tu * Tu * Me
* Ummuhan Baş Aslan, ² Şehmus Aslan, ¹ Ali Kitiş, ¹ Erdal Çelik * Pamukkale University ¹ Pamukkale University School of Physical Therapy and Rehabilitation ² Pamukkale University School of Sports Sciences and Technology		* Lale Orta, *Türkan Söğütçü * Çanakkale Onsekiz Mart University, Faculty of Education, Department of Physical Education and Sports		P13
15:30-16:00	Group E	Moderator: Leyla Tavacıoğlu		DEV
P102	Management and Organization	P117	Management and Organization	FOR
MENAGER AND FANS' OPINION AND EXPECTATION ABOUT SECOND PROFESSIONAL SOCCER LEAGUE TEAM		THE DETERMINATION STUDENT'S PARTICIPATION LEVELS TO RECREATIONAL ACTIVITIES IN UNIVERSITIES OF TURKEY		* Ni * Hk * Mi
* Arslan Kalkavan, *Fatih Bektaş * Dumlupınar University, School of Physical Education and Sports ¹ Karadeniz Technical University, Faculty of Education		* Velittin Balcı, *Aydın İlhan * Ankara University		P13
P103	Management and Organization	P118	Management and Organization	THE
PROFILE OF SPORT CONSUMERS AND THEIR MEDIA PREFERENCES: DEVELOPMENT OF AN INSTRUMENT		THE DEVELOPMENT OF SPORT INDUSTRY AND ECONOMIC EFFECTS OF SPORT INDUSTRY IN CHANGING WORLD		GYM
* H. Birol Yalçın, *Selami Özsoy, *Bekir Yüktaşır, *Yılmaz Uçan * Abant İzzet Baysal University		* Nilgün Çağlarırnak Uslu, *Ahmet Uslu * Anadolu University, Faculty of Economic and Administrative Sciences, Department of Economics ¹ Anadolu University, School of Physical Education and Sports		* Hk * At
P104	Management and Organization	15:00-15:30	Group G	Moderator: Aysel Pehlivan
AN APPLICATION MODEL OF TOTAL QUALITY MANAGEMENT AND STRATEGIC PLANNING FOR SPORTS MANAGEMENT DEPARTMENTS OF THE SCHOOLS OF PHYSICAL EDUCATION AND SPORT		P124	Management and Organization	P13
* Haluk Çerez * Akdeniz University School of Physical Education and Sport		TV AND FOOTBALL		THE
P105	Management and Organization	* Ayşe Atalay * M.U. School of Physical Education and Sports		GYM
THE POSITION AND THE ROLE OF SPORTS IN RECREATIONAL ACTIVITIES OF STUDENT STUDYING IN PHYSICAL EDUCATION AND SPORTS HIGHER SCHOOLS (EXAMPLE OF ANKARA)		P125	Management and Organization	* Hk * G * Ph * Gc * Gc
* Volkan Yaman, ¹ Figen Yaman, ¹ Nazım Burgul * Hacettepe University ¹ Yakın Doğu University		HOW TURKISH WOMEN VOLLEYBALL TEAM GAMES IN WORLD CUP 2003 WERE CONVEYED IN TURKISH NEWSPAPER AND ITALY AS AN EXAMPLE		P13
P106	Management and Organization	* Cem Cetin * Kocaeli University		BO
A RESEARCH ON NECESSARY QUALIFICATIONS OF SPORTS MANAGER		P126	Management and Organization	PR
* Hakan Sunay, *Ferhat Gündoğdu * Ankara University, School of Physical Education and Sports		THE OUTSOURCING APPLICATIONS FOR THE TRAVEL ORGANISATIONS OF THE SPORT CLUBS		* Dk * Q * U * Is
P107	Management and Organization	* Hanife Banu Ataman, ¹ Müslim Bakır * İstanbul University School of Physical Education and Sports ¹ Marmara University School of Physical Education and Sports		1
AN INVESTIGATION ABOUT AGGRESIVENESS KIND OF FOOTBALL TRAINERS		P127	Management and Organization	P13
* Recep Cengiz, ¹ Fatih Yenel * Health Sciences ¹ Gazi University				TH

P128 Management and Organization**PARLIAMENTARIANS' OPINIONS ABOUT PROBLEMS OF TURKISH SPORT**

*Hamdi Alper Güngörmüş, *Baki Yilmaz, *İ. Fatih Yenal
*Gazi University

P129 Management and Organization**USING EFFICIENCY OF SPORT PLANTS IN ELAZIG CITY CENTER**

*Eyüp Nacar, *Fikret Ramazanoğlu, *M. Fatih Karahüseyinoğlu, Eyüp Yıldırım,
*Erkan Demirel, *Cüneyt Kılıç
*Firat University, School of Physical Education and Sports
*Marmara University, School of Physical Education and Sports

10:30-11:00

Group D

Moderator: Suat Karaküçük

P130 Movements and Training**TO COMPARE THE MOTOR PROFILE OF THE MILITARY ACADEMY FRESHMEN OF TWO DIFFERENT BACKGROUNDS**

*Tuncay İskender, *Salih Pınar
*Turkish Military Academy
*Marmara University, School of Physical Education and Sports

P131 Movements and Training**DEVELOPING REGRESSION FORMULAS USING DEXA AS A CRITERION METHOD FOR SEDENTARY WOMEN BETWEEN 40 AND 55 YEARS**

*Nigar Sirek Küçükkuş, *Feza Korkusuz
*Hacettepe University School of Sports Sciences and Technology
*METU, Medical Center

P132 Movements and Training**THE COMPARISON OF REACTION TIMES AND GRIP STRENGTH OF ELITE MALE GYMNASTS AND SEDANTER INDIVIDUALS IN TURKEY**

*Hakkı Çoknaz
*Abant İzzet Baysal University, School of Physical Education and Sports

P133 Movements and Training**PULMONARY FUNCTION TEST VALUES OF REGULAR BASKETBALL PRACTICES OF CHILDREN OF 8-12 YEARS**

*Hakan Tunay, *Muhsin Hazar, *H. Serdar Gergerlioğlu, *Çağatay Hazar, *Cahit Bağcı
*Gaziantep University Graduate School of Health Sciences, Department of Physical Education and Sports
*Gaziantep University Graduate School of Health Sciences,
*Gaziantep University Faculty of Medicine Department of Physiology

P134 Movements and Training**THE ENERGY WHICH IS EXPENDED DURING DIFFERENT EXERCISE TESTS AND BODY COMPOSITION**

*Nurdan Tatar Kemer, *Sedat Muratlı
*Akdeniz University, School of Physical Education and Sports

P135 Movements and Training**BODY COMPOSITION AND ANTHROPOMETRIC MEASUREMENTS IN PROFESSIONAL BALLET DANCERS**

*Deniz Namaraslı, *Türker Şahinkaya, *Özlem Say, *Mehmet Ünal, *Abidin Kayserlioğlu
*Orthosports Medical Center
*University of İstanbul, İstanbul Medical Faculty, Sports Medicine Department
*İstanbul Sport

10:30-11:00

Group E

Moderator: Mehmet Öztürk

P148 Movements and Training**THE EFFECTS OF AROUSAL LEVEL ON REACTION TIME OF THE EIGHT-YEAR OLD CHILDREN IN KARATE**

*Gülşay Güzel, *Hülya Gökmen, *Gül Tiryaki Sönmez,
*Bekir Yüktaşır, *Ferman Konukman
*Abant İzzet Baysal University, Institute of Health Sciences
*Abant İzzet Baysal University

P149**COMPARISON OF THE EFFECTS OF PLYOMETRIC TRAININGS ON ATHLETES WHO HAVE DIFFERENT ANAEROBIC POWER**

*Cem Kurt, *Hanifegül Taşkıran
*Trakya University Physical Education and Sports Department
*Trakya University School of Physical Education and Sport

P150**Movements and Training TO COMPARE SOME PHYSIAL FEATURES OF SAME AGE GROUP GIRLS WHICH ATTEND TO 7-8 AGED RITHMIC GYM SPORT AND WHICH DON'T**

*Sürhat Müniroğlu, *Ayşegül Evren
*Ankara University, School of Physical Education and Sports

P151**Movements and Training COMPARISON THE PHYSICAL AND PHYSIOLOGY PARAMETERS ON THE BEFORE & AFTER OF THE PRE-SEASON IN THE 2. LEAGUE SOCCER TEAM**

*Nurtekin Erkmén, *Turgut Kaplan, *Halil Taşkın, *Ersan Kara
*Health Sciences
*Selçuk University, School of Physical Education and Sports
*Gazi University, Institute of Health Sciences

P152**Movements and Training PHYSIOLOGICAL PROFILES OF YOUNG MALE TURKISH NATIONAL FENCING TEAM**

*M. Zeki Özkol, *Faik Vural
*Ege University Department of Physical Education and Sports

P153**Movements and Training EFFECTS OF MENSTRUAL CYCLE ON THE SPORTS PERFORMANCE**

*Osman İmamoğlu, *Pelın Akyol
*Öndokuz Mayıs University, Yaşar Doğu School of Physical Education and Sports

10:30-11:00

Group F

Moderator: M. Ferit Acar

P166**Movements and Training PHYSICAL AND PHYSIOLOGICAL CHARACTERISTICS OF 12 – 14 AGE FEMALE VOLLEYBALL PLAYERS**

*Gülbin Rudarlı Nalçakan, *M. Zeki Özkol, *Faik Vural
*Ege University Department of Physical Education and Sports

P167**Movements and Training COMPARISON OF METABOLIC RESPONSES TO MODIFIED SHUTTLE RUN TEST APPLIED ON DIFFERENT GROUND SURFACES AND COURSES**

*Alper Aslan, *Emrah Çökelekoğlu, *Ümid Karlı, *Alpay Güvenç, *Tahir Hazır, *Caner Açıkkada
*Hacettepe University, Helath Sciences
*Hacettepe University, School of Sport Sciences and Technology

P168**Movements and Training THE EFFECT OF DIFFERENT OVERLOADS WITH THERA-BANDS ON LEG STRENGTH**

*Bilal Biçer, *Gül Tiryaki Sönmez, *Bekir Yüktaşır, *H. Birol Yalçın, *Fatih Kaya
*Abant İzzet Baysal University

P169**Movements and Training THE EFFECTS OF 12 WEEKS MOVEMENT TRAINING WITH BALL AND WITHOUT BALL ON PHYSICAL APPROPRIATENESS OF FEMALE CHILDREN VOLEYBALL PLAYERS**

*Yüksel Savucu, *Y. Polat
*Health Sciences
*MU, School of Physical Education and Sports

P170**Movements and Training ANAEROBIC POWER AND CAPACITY OF NATIONAL LEVEL ATHLETES**

*Alper Aşçı, *Tahir Hazır, *Alpan Cinemre, *Sinem Mavili, *Zambak Şahin,
*Caner Açıkkada
*Hacettepe University, School of Sport Sciences and Technology

10:30-11:00 Group B Moderator: Gıyaseddin Demirhan

P184 Physical Education
PRIMARY SCHOOL STUDENTS' PERCEPTIONS ABOUT SAME SEX VERSUS COEDUCATIONAL PHYSICAL EDUCATION CLASSES

* İrmak Hürmeriç, *Leyla Saraç, *Settar Koçak
* *Middle East Technical University*

P185 Physical Education
EFFECTS OF A WEB-ENHANCED FIRST AID COURSE ON THE FIRST AID KNOWLEDGE OF UNIVERSITY STUDENTS IN MIDDLE EAST TECHNICAL UNIVERSITY

* Leyla Saraç, *Macide Tüzün, *M. İlevent İnce, *Şeref Çiçek
* *Middle East Technical University*

P186 Physical Education
THE EFFECT OF MENTAL TRAINING ON THE SKILL LEARNING SWIMMING IN THE STUDENTS OF PHYSICAL EDUCATION

* Saeed Sadeghi Boroujerdi
* *Kurdistan University*

P187 Physical Education
THE EVOLUTION OF PSYCHO-SOCIAL STATE OF THE GIRL SOCCERER WHOSE AGE UNDER 16 THAT ATTENDED TO THE RIVA - PREP CAMP IN 20-26 JUNE 2004

* Muharrem Öner
* *Ministry of Education, Kütahya Atatürk High School, Teacher of Physical Education*

P188 Physical Education
PSYCHO-SOCIAL AND DEMOGRAPHIC PROPERTIES OF 14-16 YEAR OLD YOUNG BASKETBALL PLAYERS IN ISTANBUL

* Bilge Donuk, *İbrahim Balcıoğlu, *Fatih Şenduran, *İnan Ülker
* *Istanbul University Institute of Social Sciences*
* *Istanbul University, Cerrahpaşa Faculty of Medicine*
* *Marmara University School of Physical Education and Sports*
* *Istanbul University School of Physical Education and Sports*

P189 Physical Education
THE OPINIONS OF PHYSICAL EDUCATION AND SPORTS CANDIDATE TEACHERS ABOUT THE EFFECT OF THE 'TEACHERS PRACTICE LESSON'

* Nevin Gündüz, *Hakan Sunay, *Oğuzhan Dalkıran, *Belgin Gökyürek
* *Ankara University School of Physical Education and Sports*

10:30-11:00 Group C Moderator: Füsün Öztürk Kuter

P208 Physical Education
SCHOOL OF PHYSICAL EDUCATION STUDENTS ATTITUDES TOWARD TEACHING

* Hanifi Üzümlü, *H. Birol Yalçın, *Bilal Biçer, *Bekir Yüktaşır, *Yunus Yıldırım
* *Abant İzzet Baysal University*
* *Mustafa Kemal University*

P209 Physical Education
A SELECTION OF AMERICAN FOLK DANCES AND THEIR HISTORICAL ROOTS

* Colleen West
* *Brigham Young University*

P210 Physical Education
EVALUATION OF MOTOR SKILLS ANALYSIS OF KULELİ MILITARY SCHOOL STUDENTS

* İnci Akan, *İbrahim Şahin, *Emin Süel, *Nurper Özbar, *Mustafa Erzeybek
* *Marmara University School of Physical Education and Sports*

P211 Physical Education
DETERMINATION OF BODY COMPOSITION OF KULELİ MILITARY SCHOOL STUDENTS

* Nurper Özbar, *Emin Süel, *İbrahim Şahin, *İnci Akan, *Serkan Memnun
* *Marmara University School of Physical Education and Sports*

P212 Physical Education

ATTITUDES OF PRE-SERVICE TEACHERS TOWARD TEACHING PROFESSION IN PHYSICAL EDUCATION AND SPORT DEPARTMENT IN ABANT İZZET BAYSAL UNIVERSITY

* A. Dilşad Mirzeoğlu, *Aylin İlhan
* *Abant İzzet Baysal University*

P213 Physical Education

ATTITUDES OF PRIMARY SCHOOL STUDENTS TOWARD THEIR PHYSICAL EDUCATION CLASSES IN TURKEY

* Settar Koçak, *İrmak Hürmeriç
* *METU, Physical Education and Sports Department*

15:00-15:30 Group H Moderator: Hüsrev Turnagöl

P216 Sports Nutrition

THE ANALYSIS OF THE LEVEL OF NUTRITION KNOWLEDGE OF SPORTSMEN DEATH WITH THROWN BRANCHES OF TRACK AND FIELD

* Yüksel Savucu, *Mustafa Akil, *Ümit Gürbüz
* *Health Sciences*
* *Directorate of Youth And Sports, Konya*
* *Department of Food Hygiene and Technology, Konya*

P217 Sports Nutrition

SWEAT LOSS AND FLUID INTAKE IN YOUNG MALE LONG-DISTANCE RUNNER

* Yoko Kajiwara, *Saburo Yokokura, *Masami Hirashita, *Seiichi Nakai, *Shinichiro Ono, *Shinji Kawashima
* *Bunkyo University*
* *Material Science Research Center, Meisei University, Japan*
* *Department of Social welfare, Kinjo University, Japan*
* *Department of Food and Nutrition, Kyoto Women's University, Japan*
* *Department of Natural Science Studies, Maizuru National College of Technology*
* *Toyo University, Japan*

P218 Sports Nutrition

OBESITY AND SELF PERCEPTION OF BODY WEIGHT IN DIFFERENT SOCIO-ECONOMIC STATUS

* S. Aylin Hasbay, *Pelin Bilgiç, *Gülgün Ersoy
* *Hacettepe University, Nutrition and Dietetic Department*

P219 Sports Nutrition

THE EFFECTS OF CREATINE LOADING ON THE PERFORMANCE OF AMATEUR SOCCER PLAYERS

* İsmail Mert, *Bekir Yüktaşır, *H. Birol Yalçın, *Fatih Kaya
* *Abant İzzet Baysal University*

10:30-11:00 Group I Moderator: Kemal Tamer

P245 Management and Organization

RECREATION ACTIVITIES OF THE EMPLOYEES WHO ARE WORKING IN İZMİT CITY MUNICIPALITY, THE REASONS TO TEND TO THESE ACTIVITIES AND THE BENEFITS OF THEM TO THE INDIVIDUAL

* Zekiye Başaran, *Fatih Sarımert
* *Kocaeli University, School of Physical Education and Sports*

P246 Movements and Training

STUDYING OF THE RESULTS ACCORDING TO THE HITTING AND FALLING POINTS OF SERVICE STROKES IN THE INTERNATIONAL WOMEN TENNIS TOURNAMENT

* Mine Gül, *Akın Uğurlu, *Ata Bora Başar, *Gazanfer Kemal Gül
* *Kocaeli University, School of Physical Education and Sports*
* *İlke Software*

P247 Health and Sports**THE EFFECTIVE FACTORS TO DO SPORTS IN THE MORNING*** Mehmet Zeki Kutlu, ¹Zekiye Başaran* *Kocaeli Gençlik ve Spor İl Müdürlüğü*¹ *Kocaeli University, School of Physical Education and Sports***P248 Management and Organization****THE REASONS THAT HINDER THE SPREADING OF THE SPORTS TO THE LOWEST GRADE*** Zekiye Başaran, ¹Suat Karaküçük* *Kocaeli University, School of Physical Education and Sports*¹ *Gazi University, School of Physical Education and Sports***P249 Movements and Training****THE COMPARISON OF PHYSICAL SUITABILITY PARAMETERS OF THE FIRST TEAM WITH THE LAST TEAM IN İSTANBUL YOUNG WOMEN'S LEAGUE**

* S. B. Çavuşoğlu, *N. Duvan, *H. Akdur

* *İstanbul University, School of Physical Education and Sports*

15:00-15:30 Group I Moderator: Nimet Haşıl Korkmaz

P250 Behavioral Sciences**EFFECTS OF GENDER AND GOAL ORIENTATION ON COMPETITIVE ANXIETY**

* F. Zişan Kazak

* *Ege University, School of Physical Education and Sports***P251 Management and Organization****İZMİR DE ATLETİZM VE ATLETİZM MÜSABAKALARI (XIX. YÜZYIL SONLARINDAN XX. YÜZYILA)*** Ali Güreş, ¹Günver Güneş, ²Şaheser Güreş* *Adnan Menderes University, School of Physical Education and Sports*¹ *Adnan Menderes University, Faculty of Science and Literature, Department of History*² *Adnan Menderes University, School of Physical Education and Sports***19.11.2004**

11:30-12:00 Group A Moderator: Dilara Özer

P007 Adapted PE**COMPARISON OF A 1. LEAGUE AND A 2. LEAGUE TURKISH PHYSICALLY DISABLED WHEELCHAIR BASKETBALL TEAM PLAYERS' PHYSICAL APPROPRIATENESS PARAMETERS*** Mustafa Akgün, ¹Doç. Dr. Hülya Akdur, ²Prof. Dr. Serap İnal, ³Doç. Dr. Zerrin Yiğit* *İstanbul University, School of Physical Education and Sports*¹ *İstanbul University, School of Physical Education and Sports*² *Marmara University, School of Physical Education and Sports*³ *İstanbul University, Institute of Cardiology***P008 Adapted PE****THE STUDY OF THE LEVELS OF PLAYING IN CLUBS OF THE STUDENTS THAT ATTEND SOCCER COMPETITIONS AMONG THE STATE SCHOOLS*** Muharrem Önver, ¹Ertuğrul Bulut* *Ministry of Education, Teacher of Physical Education***P009 Adapted PE****THE EFFECT OF TRAINING ON EDUCABLE MENTAL RETARDED CHILDREN'S SOME MOTOR ABILITY*** Mustafa Karahan, ¹Rifat Demir¹ *Niğde University, School of Physical Education and Sports*

15:30-16:00 Group A Moderator: Hülya Aşçı

P016 Behavioral Sciences**COMPARISON OF PRE-COMPETITION AND POST-COMPETITION ANXIETY LEVELS IN NATIONAL FEMALE RHYTHMIC GYMNASTICS TEAM**

* Ziya Koroç, *Figen Altay, *Vesile Yılmaz

* *Hacettepe University, School of Sport Sciences and Technology***P252 Management and Organization****XIX. YÜZYILDAN XX. YÜZYILA İZMİR'DE FUTBOL*** Günver Güneş, ¹Ali Güreş, ¹Şaheser Güreş* *Adnan Menderes University, Faculty of Science and Literature, Department of History*¹ *Adnan Menderes University, School of Physical Education and Sports***P253 Health and Sports****INVESTIGATION OF CORRELATION BETWEEN PERSONS PHYSICAL HEALTH AND SPORTIVE ACTIVITY, RECREATION, NOURISHMENT AND SMOKING HABITS WHO WORK IN DIFFERENT JOBS**

* Fatih Kılınc, *Yalçın Taşmektepligil, *Münevver Karabulut, *Sinan Akın

* *Dumlupınar University, School of Physical Education and Sports***P254 Health and Sports****THE RESEARCH ON THE BODY TEMPERATURES OF THE CHILDREN ATTENDING THE BASKETBALL SUMMER SCHOOLS**

* Fatih Kılınc, *Sinan Akın, *Münevver Karabulut, *Ercan Şirin,

*Mustafa Taşpınar

* *Dumlupınar University, School of Physical Education and Sports***P255 Behavioral Sciences****THE RELATIONSHIP BETWEEN GOAL ORIENTATION AND PERCEIVED MOTIVATIONAL CLIMATE AMONG HIGH SCHOOL VOLLEYBALL PLAYERS IN TURKEY*** Turhan Toros, ¹Ziya Koroç* *Pamukkale University, School of Sport Sciences and Technology*¹ *Hacettepe University, School of Sport Sciences and Technology***P017 Behavioral Sciences****THE RELATION OF EMPATHY AND TEAM COHESION IN TERMS OF TEAM SPORTS**

* Ferudun Dorak

* *Ege University Department of Physical Education and Sport***P018 Behavioral Sciences****AN ETHICAL APPROACH TO THE HANDICAPPED AND SPORTS**

* Elif Vatanoğlu, Ahmet Doğan Ataman

* *Cerrahpaşa Medical School, Medical Ethics and History Department, İstanbul University, İstanbul,***P019 Behavioral Sciences****LICENSED TEAM MERCHANDISE IN SPORT: A RESEARCH ON HIGH SCHOOL STUDENTS IN ESKİŞEHİR*** Metin Argan, ¹Meltem Nurtaniş Veliöğlü, *Mehpare Tokay Argan* *Anadolu University*¹ *Abant İzzet Baysal University***P020 Behavioral Sciences****EFFECTS OF BIOFEEDBACK AND MENTAL TRAINING ON SITUATIONAL AND PERMANENT ANXIETY IN 12-14 AGE GROUP**

* Hakan Kolayış, *Aydın Özbek

* *Kocaeli University***P021 Behavioral Sciences****COMPARISONS OF ATTENTION AND CONCENTRATION LEVELS AMONGST ATHLETES FROM VARIOUS ATHLETIC STATUS AND DISCIPLINES**

* Süleyman Morali

* *Ege University, School of PE&S*

15:30-16:00 Group B Moderator: Cengiz Karagözoğlu

P022 Behavioral Sciences

RESEARCH OF THE MALE VOLLEYBALL PLAYERS' CREATIVITY LEVELS WHO STUDY AT UNIVERSITIES IN MARMARA REGION

* Betül Bayazıt, ¹Özlem Yenigün, ¹Nahit Yenigün, ¹Bülent Bayazıt

* Kocaeli University, Health Sciences

¹ Kocaeli University School Of Physical Education and Sport Education of Recreation Department

P023 Behavioral Sciences

RESEARCH OF THE MALE VOLLEYBALL PLAYERS' HOPELESSNESS LEVELS WHO STUDY AT UNIVERSITIES IN MARMARA REGION

* Betül Bayazıt, ¹Özlem Yenigün, ¹Bülent Bayazıt, ¹Nahit Yenigün, ²Elif Karagün

* Kocaeli, Kocaeli University, Health Sciences

¹ Kocaeli University School Of Physical Education and Sport Education of Recreation Department

² Kocaeli University Health and Social Centre

P024 Behavioral Sciences

THE STUDY OF GOAL SETTING PROGRAM EFFECT ON THE ATTRIBUTIONAL STYLE AND ACHIEVEMENT MOTIVATION

* Bahram Yousefi

* Razi University-Faculty of Physical Education

P025 Behavioral Sciences

THE RELATIONSHIP BETWEEN MOTIVATIONAL VARIABLES AND COGNITIVE STATE ANXIETY, SOMATIC STATE ANXIETY, SELF-CONFIDENCE

* Biröl Doğan

* Ege University School of Physical Education and Sports

P026 Behavioral Sciences

SPORTS IN GYMNASIONS AND THE BEGINNING OF PREVENTIVE MEDICINE

* Ahmet Doğan Ataman, ¹ E. Elif Vatanöğlü

¹ Cerrahpaşa Medical School, Medical Ethics and History Department, Istanbul

P027 Behavioral Sciences

A STUDY FOR THE SOCIOLOGICAL AND PSYCHOLOGICAL VIEW OF SOCCER TEAM FANS ON PROVOCATIVE EVENTS

* H. Murat Şahin, ¹Muhsin Halis, ²Sadrettin Pençe, ²Figen Şahin, ³Selahattin Koç

* Gaziantep University, Physical Education and Sports Department

¹ University of Gaziantep, Faculty of Business Administration

² Gaziantep Kadriye-Abdülmeçit Özgözen Primary School

³ University of Gaziantep, Faculty of Medicine, Dept. of Physiology

15:30-16:00 Group C Moderator: Ziya Kuruç

P040 Behavioral Sciences

THE FACTORS AFFECTING TURKISH ELITE MEN AND WOMEN VOLLEYBALL PLAYERS' STARTING SPORTS AND THEIR EXPECTATIONS

* Hakan Sunay, ¹Barış Bayraktar

* Ankara University, School of Physical Education and Sports

P041 Behavioral Sciences

THE EFFECT OF SPORT ATTAINMENT LEVEL IN TRAIT ANXIETY

* K. alparslan Erman, A. Şahan, E. Top

* Akdeniz University, School of Physical Education and Sports

P042 Behavioral Sciences

THE STUDY OF FACTORS EFFECTING DOING SPORTS OF WORKING AND NONWORKING WOMEN AGED BETWEEN 20-40

* Gülşen Tatar, ¹Zekai Pehlivan, *Filiz Çamlıgüney

* Marmara University, School of Physical Education and Sports

¹ Mersin University, School of Physical Education and Sports

P043 Behavioral Sciences

THE APPROACHING TO DOPING OF WRESTLERS AND FACTORS AFFECTING OF DOPING IN WRESTLER

* Hasan Can İkizler, ¹Ibrahim Erdemir, ¹S. Şahin, ²G. Öztürk

* Marmara University, School of Physical Education and Sports

¹ Ministry of Education, Teacher of Physical Education

P044 Behavioral Sciences

A SCALE DEVELOPING STUDY ON THE LEVEL OF INFLUENCE OF SUPPORTER BOOING ON THE PLAYER (SLISBP)

* Fatma Çepikkurt, ¹Adnan Erkuş,

* Mersin University, School of Physical Education and Sports

¹ Mersin University Faculty of Education

P045 Behavioral Sciences

COMPARISON OF TRAIT ANXIETY LEVEL IN FEMALE AND MALE ATHLETES

* K. Alparslan Erman, A. Şahan, S. Can

* Akdeniz University, School of Physical Education and Sports

15:30-16:00 Group D Moderator: Faik İmamoğlu

P052 Behavioral Sciences

EFFECTS OF ONE WEEK CAMP ON ANXIETY FOR YOUNG AND ELDER NATIONAL WOMEN HANDBALL PLAYERS

* Hakan Kolayış, ¹Yavuz Taşkıran, ²Yıldız Ulusoy

* Kocaeli University

11:30-12:00 Group D Moderator: Metin Sayın

P053 Coaching

A PRE STUDY: COMPOSING THE SWIMMING NORMS IN TRNC

* Cevdet Tınazcı, H. Atamtürk

* Yakın Doğu University, School of Physical Education and Sports

P054 Coaching

THE EFFECTS OF TWO DIFFERENT INTERVAL TRAINING PROGRAMS ON AEROBIC AND ANAEROBIC PERFORMANCE OF 13-14 YEARS OLD MALE STUDENTS

* Bülent Tanesen, ¹Bekir Yüktaşır, ²Biröl Yalçın

* Abant İzzet Baysal University

The results were further discussed and alobrated.

P055 Coaching

COMPARISON OF UPPER BODY STRENGTH IN DIVISION II COLLEGE OFFENSIVE AND DEFENSIVE FOOTBALL PLAYERS IN THE UNITED STATES

* Bülent Ağuca, ¹Tom Ward, ¹Fred Blohm, ¹Larry Chaloupka, ¹John p. Slovak,

²Ferman Konukman, ¹İlker Yılmaz

* Texas A&M University

¹ Texas A&M University-Commerce

² Abant İzzet Baysal University

P056 Coaching

THE EFFECTS OF THE STRETCH TIME ON IMPROVING OF FLEXIBILITY

* Nurcan Demirel, ¹Bekir Yüktaşır, ¹Biröl Yalçın

* Atatürk University

¹ Abant İzzet Baysal University

P057 Coaching

THE COMPARISON OF THE DEVELOPED TRANING METHODS IN WRESTLE ON ANAEROBIC SITUATION WITH THE CONDITIONS ON THE TOURNAMENT

* Hamdi Sancaklı, Sami Mengütay

* Marmara University, School of Physical Education and Sports

P058 **Coaching**
TACTICAL ANALYSIS OF GREEK NATIONAL TEAM, UEFA 2004 CHAMPION OF EUROPE FOOTBALL CHAMPIONSHIP

* Orhan Işık, ¹Ökmen Ahmet Şadan, *Naim Sert
 * Trakya University, School of Physical Education and Sports
¹ Muğla University, School of Physical Education and Sports

11:30-12:00 Group G Moderator: Kamil Özer

P070 **Health and Sports**
HEALTHY LIVING

* Milana Nostramaite
 * Fitness Club, milana@centras.lt

P071 **Health and Sports**
THE EFFECTS OF ADDITIONAL ECCENTRIC LOADING ON SUBSEQUENT CONCENTRIC STRENGTH

* Salih Pınar, ¹Bülent Hatip
 * MU, School of Physical Education and Sport
¹ Coliseum Sports Center

P072 **Health and Sports**
THE EFFECT OF THE 10-WEEKS AEROBIC EXERCISE PROGRAMME OF THE YOUNG, WORKING SEDANARY INDIVIDUALS ON THEIR PHYSICAL FITNESS LEVELS AND BLOOD PRAMETERS

* Ömer Can Göksu, *Hülya Akdur, *Nilüfer Ülger,
¹Zerrin Yiğit
¹ Istanbul University School of Physical Education
¹ Istanbul University Cardiology Institute

P073 **Health and Sports**
THE EFFECTS OF AEROBIC TRAINING PROGRAM ON THE PHYSICAL FITNESS IN YOUNG WOMEN

* Nurtekin Erkmen, *Gülsüm Baştuğ, ¹Özden Taşğın
 * Gazi University, Institute of Health Sciences
¹ Selçuk University, School Of Physical Education And Sport

P074 **Health and Sports**
RELATIONSHIP BETWEEN ABDOMINAL STRENGTH/ENDURANCE TEST, TEST TIME AND BODY COMPOSITION IN CHILDREN

* Şükrü Serdar Balcı, *Hacı Ahmet Pekel, *Kemal Tamer
 * Gazi University, School of Physical Education And Sport

11:30-12:00 Group H Moderator: Hakan Gür

P086 **Physical Education**
THE EFFECTS OF WEIGHT TRAINING ON VIEWS OF FEMALE AND MALE UNIVERSITY STUDENTS ABOUT THEIR BODIES

* İlknur Hacısöftaoğlu, ¹Dilem İrkin, ¹Alpan Cinemre, ¹Nefise Bulgu
 * Hacettepe University, School of Sport Science and Technology
¹ Hacettepe University

P087 **Health and Sports**
A WORKSITE HEALTH PROMOTION INTERVENTION IN A LARGE COMPANY

* Emin Ergen, ²Gülgün Ersoy, *Rüştü Güner, ¹Ayda Karaca, ²Aylin Hasbay,
 *Ali Erdoğan, *Esra Cırcı, *Savaş Kudaş
 * Ankara University School of Medicine Sports Medicine Department
¹ Hacettepe University School of Sport Sciences and Technology
² Hacettepe University Dept. of Dietetics and Nutrition

P088 **Health and Sports**
INVESTIGATION PREVALENCE OF OBESITY AND OVERWEIGHT ON SCHOOL CHILDREN WHO HAVE DIFFERENT SOCIO-ECONOMIC STATUS

* Yeliz Özdöl, *Kamil Özer, *İlkay Orhan
 * Akdeniz University, School of Physical Education and Sports

P089 **Health and Sports**
INVESTIGATION OF SOME FACTORS HAVE AN EFFECT ON AEROBIC FITNESS AMONG PE STUDENTS

* Salih Pınar, *Aysel Pehlivan, *Filiz Çamlıgüney,
 *Selda Uzun
 * Marmara University, School of Physical Education and Sports

P090 **Health and Sports**
THE ACUTE PHYSICAL EFFECTS OF ACTIVE AND PASSIVE SMOKING ON SEDENTARY MALE UNIVERSITY STUDENTS AGED 18 – 25

* Barış Sözeri, ¹Özkan Altun, ¹Macide Tüzün, ²Feza Korkusuz, ³Aysel Atımtay
 * Middle East Technical University, Department of Physical education and Sports
¹ Middle East Technical University Physical Education and Sports Department
² Middle East Technical University Medical Center
³ Middle East Technical University Department of Environmental Engineering

15:30-16:00 Group D Moderator: Faik İmamoğlu

P097 **Management and Organization**
EVALUATION OF THE RECREATIONAL LEADERS EXPERIENCE IN UNIVERSITY LEISURE PROGRAMS

* Dilsad Çoknaz, ¹Müberra Çelebi
 * AİBU, School of Physical Education and Sports
¹ Abant İzzet Baysal University

P098 **Management and Organization**
THE ANALYSIS OF THE FACTORS AFFECTING THE PRODUCTIVITY OF CITY ADMINISTRATORS OF THE YOUTH AND SPORT GENERAL MANAGEMENT

* Yeser Eskicioğlu, Nevzat Mirzeoğlu, Müberra Çelebi
 * Abant İzzet Baysal University

P099 **Management and Organization**
LEADERSHIP ANALYSIS OF THE GENERAL SECRETARIES OF SPORT FEDERATIONS

* Dursun Katkat, Orcan Mizrak, İ. Fatih Yenel
 * Gazi University

P100 **Management and Organization**
A STUDY ON THE IMPORTANCE OF COMMUNICATION IN SPORTS AND ITS EFFECTS UPON TEAM PERFORMANCE

* Mert Erkan, *Mustafa Serdar Terekli
 * Anatolia University of Sport and Physical Education

P101 **Management and Organization**
PERCEIVED PERSONALITY CHARACTERISTICS OF SPORT

* Canan Savran, ¹Dilsad Çoknaz, *Lale Güler, *Melih Atalay
 * Marmara University
¹ Abant İzzet Baysal University

15:30-16:00 Group E Moderator: Sadettin Kirazcı

P108 **Management and Organization**
EFFECTS OF SPORT SPONSORSHIP ON CONSUMERS

* Sema Alay
 * Department of Physical Education and Sport, Faculty of Education, Middle East Technical University

P109 **Management and Organization**
DO THE OLYMPICS STILL DISPLAY THE OLYMPIC SPIRIT?

* Ayşe Atalay
 * Sport Academy Marmara University

P110 Management and Organization**THE ROLE OF THE PLANNING PROCESS IN THE DIMENSION OF OUTDOOR EDUCATION PRACTICE**

* Muberra Çelebi, ¹Savaş Kırıkoğlu, ²Selhan Özbey Alkurt
 * Abant İzzet Baysal University
¹ Ministry of Education Physical Education Teacher
² Celal Bayar University, The School of Physical Education and Sports

P111 Management and Organization**VARIABLES AFFECTING THE PHYSICAL EDUCATION AND SPORTS SCHOOL STUDENTS' DECISION TO ATTEND SPORT GAMES AS A SPECTATOR**

* Ramazan Timuçin Gençer, *Ali Aycan
 * Marmara University, School of Physical Education and Sports

P112 Management and Organization**THE CONTRIBUTIONS OF LOCAL NEWS PAPERS FOR PREVALENT OF SPORT CULTURE**

* Sebahattin Devecioğlu, *M. Fatih Çakar, *Bilal Çoban
 * Firat University, School of Physical Education and Sports
¹ Firat University, Faculty of Communication

P113 Management and Organization**A STUDY OF LEADERSHIP STYLES: PERCEPTIONS OF COLLEGE STUDENTS IN THE UNITED STATES**

* Paul Blair
 * University of Tennessee at Martin

15:30-16:00

Group F

Moderator: İbrahim Yıldırım

P119 Management and Organization**A JUDICIAL STUDY OF THE LAW PREVENTING VIOLENCE AND DISORDER IN SPORTING COMPETITIONS**

* Lale Orta, ¹Yüksel Yalova
 * Çanakkale Onsekiz Mart University, Faculty of Education, Department of Physical Education and Sports
¹ Retired Minister of State, Lawyer

P120 Management and Organization**CONFLICT MANAGING METHODS OF MANAGERS WITH WORKERS WORKING IN AMATEUR SPORTS FEDERATIONS OF GENERAL MANAGER OF YOUTH AND SPORT IN TURKEY**

* Hakan Sunay, *Caner Yazıcı
 * Ankara University, School of Physical Education and Sports

P121 Management and Organization**MEASURING SPORT SPONSORSHIP SUCCESS: BASIC THEORIC APPROACHES ABOUT EVALUATION**

* Meltem Nurtanış Veliöğlu, ¹Metin Argan,
¹Mehpare Tokay Argan
 * Abant İzzet Baysal University
¹ Anadolu University, Bozüyük Vocational School of Higher Education

P122 Management and Organization**THE POTENTIAL CONTRIBUTIONS OF SPONSORSHIP IN THE PROGRESSION OF SPORT EVENTS: THE CASE OF OLYMPIC GAMES**

* Ramazan Timuçin Gençer, *Ümit Kesim
 * Marmara University, School of Physical Education and Sports

P123 Management and Organization**THE VALIDITY AND THE RELIABILITY OF THE TURKISH VERSION OF THE MOTIVATION SCALE FOR SPORT CONSUMPTION**

* Barış Sözeri, *M. Settar Koçak
 * M.E.T.U. Physical Education and Sports Department

11:30-12:00

Group D

Moderator: Fehmi Tuncel

P136**Movements and Training****TO COMPARE THE BLOOD PROFILE OF THE MILITARY ACADEMY FRESHMEN OF TWO DIFFERENT BACKGROUNDS**

* Tuncay Iskender, ¹Fatma Çelik kayapınar, ¹Salih Pınar
 * Turkish Military Academy
¹ Marmara University, School of Physical Education and Sports

P137**Movements and Training****RESEARCH ABOUT THE EFFECT OF ISOKINETIC FORCE ON SPRINT SPEED IN YOUNG SOCCER PLAYERS**

* N. Şahbaz, ¹C. Büyükerem, ²C. Güler, ²M. Öztürk
 * Istanbul University, School of Physical Education and Sports
¹ BJK Soccer Team Conditions Trainer
² Istanbul University, School of Physical Education and Sports

P138**Movements and Training****COMPARISON OF STRESS HORMONE LEVELS AND RELATIONSHIP WITH IMMUNOLOGICAL PARAMETERS OF THE PROFESSIONALE BASKETBALL PLAYERS AND CYCLISTS DURING THE TRAINING PERIOD**

* Canan Dinçer Albayrak, *Malik Beyleroğlu, *Sevda Çiftçi, *Seray Soydaş Yaralı
 * Sakarya University, School of Physical Education and Sports

P139**Movements and Training****POSTURAL ANALYSIS IN PROFESSIONAL BALLET DANCERS**

* Deniz Namaraslı, ¹Türker Şahinkaya, ¹Özlem Say,
²Mehmet Ünal, ¹Abidin Kayserilioğlu
 * Orthosports Medical Center
¹ University of Istanbul, Istanbul Medical Faculty, Sports Medicine Department
² Istanbul Sport

P140**Movements and Training****INVESTIGATION OF ANAEROBIC POWER AND CAPACITY PERFORMANCE AT FIELD AND LABORATORY CONDITION IN ELITE TENNIS PLAYERS**

* Tolga Akşit, *M. Zeki Özkol
 * Ege University Department of Physical Education and Sports

P141**Movements and Training****INVESTIGATION OF CORRELATION BETWEEN SPIROMETRIC RESPIRATORY FUNCTIONS AND 30 SECONDS WINGATE TEST PERFORMANCE IN YOUNG SUBJECT**

* Cengiz Arslan, *Ercan Gür, *Alper Karadağ
 * Firat University, School of Physical Education and Sports

11:30-12:00

Group E

Moderator: Erdal Zorba

P154**Movements and Training****DO CUSTOM-MADE MOUTHGUARDS HAVE NEGATIVE EFFECTS ON AEROBIC PERFORMANCE CAPACITY OF ATHLETES?**

* Ayşe Diljin Keçeci, ¹Cem Çetin, ²Erdal Eroğlu,
¹Metin Lütfi Baydar
 * Department of Restorative Dentistry and Endodontics, Süleyman Demirel University
¹ Department of Sports Medicine, Süleyman Demirel University
² Department of Prosthetic Dentistry, Süleyman Demirel University

P155**Movements and Training****BACK MUSCLE FATIGUE IN SUBMAXIMAL ERGOMETER ROWING: AN EMG STUDY**

* Pınar Arpınar Avşar, ¹Abdullah Ruhi Soylu, ¹Hayri Ertan, ¹Beyza Şimsek,
²Feza Korkusuz
 * Middle East Technical University, Department of Physical Education and Sport
¹ Hacettepe University, School of Medicine, Department of Biophysics
² Middle East Technical University, Medical Center

P156 Movements and Training

THE INVESTIGATION OF SHORT DISTANCE SWIMMER TO COMPARE BETWEEN 50 METER CRAFTSTYLE SWIMMING AND 30 METER SPRINT TEST RESULTS

* Sürhat Müniroğlu, ¹Burcu Tüzen, ²Kerem Tanilkan
* Ankara University, School of Physical Education and Sports

P157 Movements and Training

EFFECTS OF CHRONIC EXERCISE ON REPRODUCTIVE ENDOCRINE SYSTEM IN MEN AND WOMEN

* Canan Dinçer Albayrak, ¹Malik Beyleroğlu, ¹Seray Soydaş, ¹Sevda Çiftçi
* Sakarya University
¹ Sakarya University, School of Physical Education and Sports

P158 Movements and Training

EFFECT OF SPORTS DRINK ON ANAEROBIC THRESHOLD

* Gencay Emekçi, ¹S. Nazan Koşar, ²H. Hüsrev Turnagöl,
¹A. Haydar Demirel
* Hacettepe University School of Sports Sciences and Technology
¹ Hacettepe University Department of Sports Medicine

P159 Movements and Training

THE FINAL PHASE OF THE "ATHLETISM DEVELOPMENT PROJECT IN ISTANBUL" IN ITS THIRD YEAR

* Ilhan Ağırbaş
* Marmara University

11:30-12:00 Group F Moderator: Billur Yavuz

P171 Movements and Training

COMPARISON OF THE LOW EXTERMITE WIDENESS AND CIRCUMFERENCE AND VERTICAL JUMP MEASUREMENT BETWEEN UNIVERSITY SEDANTERY AND BASKETBALL PLAYERS

* Fatih Kılınc, ¹Arslan Kalkavan, ²Salih Pinar, ³G. Kemal Gül, ³A. Korkut Yapıcı
* Dumlupınar University, School of Physical Education and Sports
¹ Dumlupınar University
² Marmara University
³ Kocaeli University

P172 Movements and Training

CONCENTRIC ISOKINETIC SHOULDER INTERNAL AND EXTERNAL ROTATION STRENGTH IN TENNIS PLAYERS

* Gülbin Rudarlı Nalçakan
* Ege University Department of Physical Education and Sport

P173 Movements and Training

ASSESSMENT OF GENDER DIFFERENCES IN ANAEROBIC POWER AND CAPACITY

* Tahir Hazır, ¹Nazan Koşar
* Hacettepe University, School of Sport Sciences and Technology

P174 Movements and Training

THE ASSESSMENT OF THE MECHANICAL WORK AND POWER DURING THE SNATCH TECHNIQUE IN THE WEIGHT LIFTING

* Erbil Harbili
* Hacettepe University, School of Sport Sciences and Technology

P175 Movements and Training

THE INVESTIGATION OF THE RESPIRATORY PARAMETERS OF MALE CLIMBERS AT DIFFERENT HIGH-ALTITUDES

* Yüksel Savucu, ¹Mürsel Biçer, ¹Yahya Polat, ¹Mehmet Kılıç, ²Mustafa Akil
* Health Sciences
¹ S.U., School of Physical Education and Sports
² Directorate of Youth And Sports, Konya

11:30-12:00 Group A Moderator: Dilara Özer

P181 Physical Education

INVESTIGATION OF SOME FACTORS HAVE AN EFFECT ON BODY COMPOSITION AMONG PE STUDENTS

* Salih Pinar, ¹Aysel Pehlivan, ¹Filiz Çamlıgüney, ¹Selda Uzun
* Marmara University, School of Physical Education and Sports

P182 Physical Education

THE OPINIONS OF THE TEACHERS ON EFFECTIVE USING SPORTS HALL ABOUT OUT-DOOR ACTIVITIES IN THE STATE-PRIVATE, PRIMARY AND SCODARY SCHOOL'S PHYSICAL EDUCATION IN ANKARA

* Nevin Gündüz, ¹O. Dalkıran, ¹A. Altıntaş, ¹H. Sunay, ¹M. Akgül
* Ankara University

P183 Physical Education

AEROBIC ENDURANCE AND PHYSICAL CHARACTERISTICS OF YOUNG ELITE SOCCER PLAYERS

* Sinan Bozkurt, ¹Fatih Hazar
* Marmara University, School of Physical Education and Sports

11:30-12:00 Group B Moderator: Hakan Sunay

P190 Physical Education

THE EUROFIT TEST BATTERY EVALUATION OF MALE AND FEMALE ELEMENTARY SCHOOL STUDENTS' AGES BETWEEN 7-11 IN TRNC

* Cevdet Tinazcı, ¹Osman Emiroğlu, ¹Nazım Burgul
* Near East University, School of Physical Education and Sports

P191 Physical Education

PHYSICAL EDUCATION TEACHERS' OPINIONS ABOUT THE TEACHER BEHAVIOR DIMENSION OF CLASSROOM MANAGEMENT

* Bengü Güven, ¹Gıyasettin Demirhan
* Hacettepe University School of Sport Sciences and Technology

P192 Physical Education

EVALUATION OF THE EFFECT OF RHYTHM EDUCATION ON ACQUIRING COMPLEX GYMNASTICS SKILLS AND MOTOR CHARACTERISTICS

* Oya Erkut Atılğan, ¹Salih Pinar
* Marmara University, School of Physical Education and Sports

P193 Physical Education

GENDER INTERACTION IN COED PHYSICAL EDUCATION WITH QUANTITATIVE AND QUALITATIVE APPROACH: A CASE STUDY

* Canan Koça, ¹Gıyasettin Demirhan
* Baskent University, Sport Sciences Department
¹ School of Sport Sciences and Technology, Hacettepe University

P194 Physical Education

APPLICATION OF MULTIPLE INTELLIGENCES IN TEACHING PHYSICAL EDUCATION AND A SAMPLE OF DAILY LESSON PLAN FOR PHYSICAL EDUCATION COURSE

* Mehmet Ali Çeliksoy, ¹Coşkun Bayrak
* Anatolian University, School of Physical Education and Sports

P195 Physical Education

THE COMPARISON OF RHYTHM SENSES OF ELITE SPORTSMEN AND SEDANTER

* Dursun Katkat, ¹Zinnur Gerek
* Gazi University

15:30-16:00 Group G Moderator: Serdar Arıtan
P214 Research Methodology
EVALUATING THE SUCCESS IN FOOTBALL ACCORDING TO ABILITY AND SKILLS USING ANALYTIC HIERARCHY PROCESS
 * Seyhan Sipahi, ¹Erden Or
 * *Istanbul University Business Administration Faculty*
¹ *Istanbul University School of Physical Education and Sports*

P215 Research Methodology
PHD THESES IN TURKISH SPORTS SCIENCES: A STUDY COVERING THE YEARS 1988-2002
 * Hakan Yaman, ¹Emrah Atay
 * *Akdeniz University, Faculty of Medicine*
¹ *Akdeniz University, Institute of Health Sciences*

15:30-16:00 Group H Moderator: Ülker Bilgin
P220 Sports Nutrition
EVALUATION OF THE INFORMATION LEVELS ABOUT ATHLETE NUTRITION OF SOCCER TRAINERS IN DENİZLİ
 * Halit Egesoy, ²Çağlar Şaşmaz, ¹Hakan Ünal
 * *Pamukkale University*
¹ *Pamukkale University, College of Education, Department of Physical Education and Sport*
² *Pamukkale University, Hospital of Research and Development*

P221 Sports Nutrition
THE KNOWLEDGE AND LEVEL OF USE OF ELITE CLASS ATHLETES ABOUT ERGOGENIC AIDS IN SOME TEAM SPORTS
 * Dursun Güler, ¹Ömer Şenel, ¹Mergül Çolak,
²Güneş Dönmez, ³Erdal Zorba
 * *SDU, Burdur Faculty of Education, Department of Physical Education and Sports*
¹ *Gazi University, School of Physical Education and Sports*
² *Gazi University Kastamonu School of Physical Education and Sports*
³ *Marmara University, School of Physical Education and Sports*

P222 Sports Nutrition
TECHNICAL DIRECTORS OPINION AND THEIR DEGREE OF KNOWLEDGE ABOUT ATHLETE NUTRITION IN TURKISH REPUBLIC OF NORTHERN CYPRUS SOCCER SUPER LEAGUE (2003-2004 SEASON)
 * Nazım Burgul, *Cevdet Tınazcı, *Beha Karabulutolu
 * *Near East University*

15:30-16:00 Group G Moderator: Serdar Arıtan
P223 Technology
MATHEMATICAL MODELLING OF CRAWL STROKE SWIMMING
 * Tolga Akış, ¹Yusuf Orçan, ¹Ahmet N. Eraslan
 * *Atılım University*
¹ *Department of Engineering Sciences, Middle East Technical University*

P224 Technology
TURKISH 1ST LEAGUE SOCCER TEAMS AND FOREIGN TEAMS TECHNICAL ANALYSIS OF COMPETITIONS
 * Nurper Özbar, ²Yahya Polat, ¹Fatma Çelik Kayapınar
 * *Marmara University*
¹ *Marmara University, School of Physical Education and Sports*
² *Konya Selçuk University, School of Physical Education and Sports*

P225 Technology
THE ANALYSIS OF GOAL PASS AND GOAL KICK OF FENERBAHÇE, BEŞİKTAŞ, AND GALATASARAY IN 2003-2004
 * Eyüp Yavuz, *Kamil Erdem, *Ali Kızılet, *İbrahim Erdemir, *Abdullah Canikli
 * *Marmara University, School of Physical Education and Sports*

P226 Technology
A KINEMATIC COMPARISON BETWEEN THE SEMI-FINALS AND THE FINALS FOR 50M SWIMMING RACES OF THE FOUR STROKES
 * Hashem Kilani, ¹Wasim Zeidan
 * *University Of Jordan*
¹ *Faculty of Physical Education, University of Jordan, Amman, Jordan*

11:30-12:00 Group I Moderator: Zekeriya Pehlivan
P233 Behavioral Sciences
THE STUDY OF THE OPINIONS OF STUDENT ATHLETES ABOUT THEIR MAKING USE OF COUNSELING SERVICES OF UNIVERSITIES
 * Zekeriya Göktaş, ¹Mansur Onay, ²A. Naci Arıkan,
²Süleyman Can
 * *Balıkesir University, School of Physical Education and Sports*
¹ *Gazi University, School of Physical Education and Sports*
² *Muğla University, Faculty of Education*

P234 Movements and Training
ATTITUDE OF STUDENTS, WHO ARE ENGAGED IN SPORTS AND WHO ARE NOT, TOWARDS PHYSICAL EDUCATION AND SPORTS
 * Murat Kangalgil, Deniz Hünük, Gıyasettin Demirhan
 * *Hacettepe University Sport Sciences and Technology*

P235 Movements and Training
THE COMPARISON OF KINEMATIC PARAMETERS DURING THE THROWING PHASE IN ELIT AND SUB-ELIT JAVELIN THROWERS
 * Çiğdem Bulgan, *Bergün Meriç, *Menşüre Aydın, *Aydın Özbek
 * *Kocaeli University, School of Physical Education and Sports*

P236 Behavioral Sciences
BIOMECHANICAL ANALYSIS OF THE OVERARM THROW TECHNICS IN DIFFERENT BRANCHES
 * B. Meriç, *M. Aydın, *T. Çolak, ¹A. Özbeç
 * *KOU Phy. Edu. and Sport Dept.*
¹ *KOU Fac. of Medicine Anatomy Dept.*

P237 Management and Organization
TURKISH WOMEN IN GERMANY, SPORT AND MODERNIZATION
 * Bahar Akçayer
 * *Deutsche Sporthochschule Köln; Institut für Freizeitwissenschaft*

P238 Movements and Training
COMPARISON OF SQUAT AND COUNTER MOVEMENT JUMP HEIGHTS AND POWER SCORES OF ELITE ATHLETES
 * Alpan Cinemre, *Alper Aşçı, *Tahir Hazır, *Cane Açıkkada, ¹Cevdet Tınazcı,
²Emin Ergen
 * *Hacettepe University Sport Sciences and Technology*
¹ *Near East University, Department of Physical Education and Sports*
² *Ankara University, Department of Sports Medicine*

15:30-16:00 Group I Moderator: Necati Dedeoğlu
P239 Health and Sports
ANTHROPOMETRIC SPECIFICATIONS OF THE MALE ELITE KARATE SPORTSMAN
 * Aytekin Soykan, *Fatma Ç. Kayapınar, *Nurper Özbar, ¹Nilüfer Soykan,
¹Cengiz Dinç
 * *Marmara University, School of Physical Education and Sports*
¹ *70. YIL Physiotherapy and Rehabilitation Education and Research Hospital*

P240 Health and Sports
ANAEROBIC POWER AND FLEXIBILITY AND REACTION TIME OF ELITE KARATE SPORTSMAN

*Fatma Çelik Kayapınar, *Aytekin Soykan, *Banu Ayça, *Nurper Özbar, *Semih Yılmaz, *Sinan Bozkurt
 *Marmara University, School of Physical Education and Sports

P241 Health and Sports
THE BIOMECHANICAL ANALYSIS OF THE FREE THROW ACCORDING TO THE CLASSIFICATION IN WHEELCHAIR BASKETBALL

*M. Aydın, *B. Meriç, *A. Özbek, *B. Bamaç
 *KOU Physical Education and Sport
 † KOU Faculty of Medicine Anatomy Dept.

P242 Health and Sports
AN INVESTIGATION ON THE INJURIES OBSERVED UNDERWATER RUGBY PLAYERS

*Levent Çavaş, †Çağın Çavaş, †Önder Dağlıoğlu
 *Dokuz Eylül University, Faculty of Arts and Sciences, Biochemistry Division
 †İzmir Municipality Underwater Rugby Team
 †Dokuz Eylül University, Faculty of Arts and Sciences, Statistics Department
 †Marmara University, Department of Physical Education and Sports

P243 Health and Sports
EFFECT OF HIGH SPEED RACE LOAD ON SUDDEN CHANGES OF SOME HORMONES

*Önder Dağlıoğlu, †Muhsin Hazar
 *Marmara Üniversitesi, Department of Physical Education and Sports
 †Gaziantep Üniversitesi, Department of Physical Education and Sports

P244 Health and Sports
PHYSICAL FEATURES AND ITS RELATIONS TO PERFORMANCE OF 17 AND UNDER 17 AGED TURKISH NATIONAL BADMINTON TEAM PLAYERS

*T. Kızılet, *M. M. Yorulmazlar, †F. Özten, *Y. Başaran
 *Marmara University, School of Physical Education and Sports
 †National Team Coach

20.11.2004

9:30-10:00 Group C Moderator: Ali Kızılet

P059 Coaching
THE LEVELS OF SPEED AND RECOVERY FOR MALE HANDBALL PLAYERS IN DIFFERENT CATEGORIES

*Osman İmamoğlu, †Necip Fazıl Kışalı
 *Ondokuz Mayıs University, Yaşar Doğu School of Physical Education and Sports
 †Atatürk University

P060 Coaching
AGILITY DEVELOPMENT WITH SPECIAL TRAINING PROGRAMS IN 12 YEARS OLD SOCCER PLAYERS

*Osman Zeki Korkmaz, *Kamil Erdem, †İbrahim Erdemir, *Ali Kızılet
 *Marmara Üniversitesi, Beden Eğitimi ve Spor Yüksekokulu

P061 Coaching
THE COMPARISON AND CONTRAST OF FATIGUE AND RECOVERY LEVELS IN FOOTBALLERS OF DIFFERENT CATEGORIES THROUGH THE REPETITIVE SPRINT TEST

*Osman İmamoğlu, †Necip Fazıl Kışalı
 *Ondokuz Mayıs University, School of Physical Education and Sports
 †Atatürk University, School of Physical Education and Sports

P062 Coaching
RELATIONSHIP AMONG THE TRAINING PARAMETERS AND OLYMPIC SNATCH PERFORMANCE

*Alper Aşçı, †Çınar Yazıcı, †Caner Açıkada
 *Hacettepe University, School of Sport Sciences and Technology

P063 Coaching
THE EFFECTS OF TWELVE WEEKS BASIC SWIMMING TRAINING ON PHYSICAL AND MOTORICAL QUALIFICATIONS OF 7-12 YEARS AGED BOY AND GIRL SWIMMERS

*Bahar Odabaş Özgür, Kenan Sivrikaya, Turgay Özgür
 *KOU, School of Physical Education and Sports

P064 Coaching
ANAEROBIC POWER AND AEROBIC ENDURANCE ON SOCCER GAME POSITIONS

*Fatih Hazar, Sinan Bozkurt
 *Marmara University, School of Physical Education and Sports

9:30-10:00 Group G Moderator: Caner Açıkada

P075 Health and Sports
EFFECTS OF STEP AEROBICS TRAINING ON ANAEROBIC PERFORMANCE OF MALE UNIVERSITY STUDENTS

*Ayşe Kin İşler, †Şükran Nazan Koşar
 *Başkent University, Sport Sciences Department
 †Hacettepe University, School of Sport Sciences and Technologies

P076 Health and Sports
LEVEL OF LIFE STYLE, HEALTH AND EXERCISE OF LECTURER AND UNIVERSITY TEACHER OF TRAKYA UNIVERSITY

*Orhan Işık, †İbrahim Erdemir, †Ebru Akkan
 *Trakya University, School of Physical Education and Sport
 †Marmara University, School of Physical Education and Sport

P077 Health and Sports
YOUNGS OPINION AND EXPECTATION WHO PARTICIPATED IN NATIONAL YOUTH CAMP

*Arslan Kalkavan, †Fatma Kerkez, †Murat Kalfa
 *Dumlupınar University, School of Physical Education and Sport
 †Karadeniz Technical University, Faculty of Education
 †Directorate of Youth and Sports, Trabzon

P078 Health and Sports
EVALUATION OF SOME ANTHROPOMETRIC AND PERFORMANCE-RELATED PHYSICAL FITNESS PARAMETERS IN CHILDREN ATHLETES

*Hacı Ahmet Pekel, †Şükrü Serdar Balcı, †Hamdi Pepe, †Özlem Arslan, †Emre Bağcı, †Kemal Tamer, †Latif Aydos, †Yaprak Kalemöğlü
 *Gazi University, School of Physical Education and Sport
 †Selçuk University, School of Physical Education and Sport
 †Gazi University, Institute of Education Sciences

P079 Health and Sports
HEALTH PROBLEMS AND EXERCISE HABITS RELATED TO SPORTING LIVES OF MALE AND FEMALE NATIONAL ATHLETES WHEN THEIR SPORTING LIFE FINISHED

*Halit Egesoy
 *Pamukkale University, Faculty of Education

P080 Health and Sports
SEX DIFFERENCES TO AEROBIC EXERCISE

*İlkay Orhan, *M. Kamil Özer, *Yeliz Özdöl
 *Akdeniz University

9:30-10:00 Group H Moderator: Füsün Toraman

P091 Health and Sports**COMPARISON OF BODY COMPOSITION BETWEEN 13-18 YEARS SWIMMERS AND NON ATHLETIC GIRLS*** Burcu Ertas, ¹Mitat Koz* Physical Education and Sport Department of Gazi University¹ Physical Education and Sport Department of Ankara University**P092 Health and Sports****THE INVESTIGATION OF THE PHYSICAL ACTIVITY OF ADOLESCENTS*** Tuncay Iskender, ¹Fatma Çelik Kayapınar, ¹Salih Pınar* Turkish Military Academy¹ Marmara University, School of Physical Education and Sports**P093 Health and Sports****THE EFFECT TO THE RESPIRATION FUNCTIONS OF THE WITH SHORT DURATION SCUBA DIVING*** Özgür Mutlu, ¹Şamil Aktaş, ²Şahin Özen, ³Esen Kıyan¹ IU, Faculty of Medicine² MU, School of Physical Education and Sports³ IU, Faculty of Medicine, Department of Ophthalmology**P094 Health and Sports****CARDIAC CHANGES IN PREPUBERTAL SWIMMERS*** Canan Ayabakan, ¹Figen Akalın, ¹Sami Mengütay,¹Birol Çotuk, ¹İlhan Odabaş, ¹Ali Özüak* Marmara University Department of Pediatric Cardiology, İstanbul¹ Marmara University, School of Physical Education and Sport, İstanbul**P095 Health and Sports****COMPARISON OF PHYSICAL ACTIVITY LEVELS OF THE STUDENTS IN İSTANBUL UNIVERSITY WHO TAKE GYM COURSES AND WHO DON'T TAKE GYM COURSES*** A. Çelik, ¹M. Öztürk* Yeni Bosna İhlas College, Basketball Coach¹ İstanbul University, School of Physical Education and Sports**P096 Health and Sports****EVALUATION OF THE FUNCTIONAL CAPACITY OF THE ELDERLY LIVING IN NURSING HOME WITH AN ACTIVE LIFE STYLE*** Feryal Subaşı, ¹Serap İnal, ¹Selda Uzun, ¹Serap Mungan Ay, ¹Ufuk Alp kaya,²İpek Yeldan* Marmara University, Faculty of Health Education¹ Marmara University, School of Physical Education and Sports² İstanbul University, School of Physiotherapy and Rehabilitation

9:30-10:00 Group D Moderator: Alparslan Erman

P142 Movements and Training**THE CHARACTERISTICS OF PHYSICAL AND ANTHROPOMETRIC DEVELOPMENT OF KINDERGARDEN CHILDREN, A YEAR PILOT STUDY*** Nurper Özbar, *Fatma Çelik Kayapınar, *Salih Pınar, ¹Şebnem Karakaş* Marmara University, School of Physical Education and Sports¹ Nasrettin Hoca Nursery School**P143 Movements and Training****EVALUATION OF THE REACTION TIMES OF THE MALE ATHLETES IN TURKISH NATIONAL ARTISTIC GYMNASTIC TEAM*** Hakkı Çoknaz, *Yeşer Eskicioğlu* Abant İzzet Baysal University, School of Physical Education and Sports**P144 Movements and Training****TRAUMA INCIDENCE OF ELITE TAEKWONDO ATHLETES, PREVENTIVE MEASURES AND FORENSIC ASPECTS*** Ayşe Diljin Keçeci, ¹Erdal Eroğlu, ²Çetin Lütfi Baydar,³Cem Çetin, ³Metin Lütfi Baydar* Department of Restorative Dentistry and Endodontics, Süleyman Demirel University¹ Department of Prosthetic Dentistry, Süleyman Demirel University² Department of Forensic Medicine, Süleyman Demirel University³ Department of Sports Medicine, Süleyman Demirel University**P145 Movements and Training****THE EVALUATION RELATIONSHIP BETWEEN SOME ANTHROPOMETRIC CHARACTERISTICS AND PERFORMANCE RELATED PHYSICAL FITNESS TEST RESULTS IN CHILDREN ATHLETES*** Hacı Ahmet Pekel, *Şükrü Serdar Balcı, ¹Hamdi Pepe, ¹Emre Bağcı, ¹Nevin Atalay Güzel* Gazi University, School of Physical Education and Sports¹ Selçuk University, School of Physical Education and Sports**P146 Movements and Training****COMPETITION TECHNIQUE ANALYSIS OF 48. EUROPEAN GRECO-ROMAN WRESTLING CHAMPIONSHIP*** Osman İmamoğlu, *Mehmet Türkmen* OMU, Yaşar Doğu School of Physical Education and Sports**P147 Movements and Training****THE INVESTIGATION OF CHANGING OF SOME BLOOD PARAMETERS OF ELITE CYCLISTS DURING THE RACE AND SOME OF THEIR MOTORICAL QUALIFICATIONS*** Yüksel Abdikoğlu, *Kenan Sivrikaya, *Bahar Odabaş Özgür, ¹Turgay Özgür,¹Menşure Aydın* KOÜ, Physical Education and Sport Highschool¹ KOÜ, Health Science Institute

9:30-10:00 Group E Moderator: Adnan Turgut

P160 Movements and Training**INVESTIGATION THE INTERACTION OF THE EFFECTS OF PHYSICAL SKILLS, TECHNICAL ABILITIES AND SOMATOTYPE PARAMETERS OF JUNIOR SOCCER TEAM PLAYER*** Gökhan Deliceoğlu, ¹Mustafa Söğüt, ¹Alper Sökmen* Kırıkkale University, School of Physical Education and Sports**P161 Movements and Training****THE ANALYSIS OF SUCCESSFUL ATTACK ORGANIZATIONS OF GREECE THE EURO 2004 CHAMPION*** Metin Çakıroğlu, *Ali Kızılet, *Kamil Erdem, *Özay Atmaca, ¹İlhan Toksöz,* Abdullah Canikli* Marmara University, School of Physical Education and Sports¹ Trakya University, School of Physical Education and Sports**P162 Movements and Training****PHYSICAL CHARACTERISTICS OF AMERICAN FOOTBALL PLAYERS IN TURKEY*** Bayrak Arıburun, *Ali Özkan, *Ayşe Kin İşler, *F. Hülya Aşçı* Başkent University Department of Sport Sciences**P163 Movements and Training****HYDRATION STATUS OF ELITE TAEKWONDO ATHLETES DURING PREPARATORY CAMP SEASON*** Mehmet Kutlu, ¹Gökçen Güler* Kırıkkale University Education Faculty, Physical Edu. and Sport Dept.¹ Firat University, School of Physical Education and Sports

P164 **Movements and Training**
ANALYSIS OF AUDITORY EVOKED POTENTIALS IN ARCHERY: A PRELIMINARY STUDY
* Hayri Ertan, ¹Feza Korkusuz
* Physical Education and Sports Department
¹ Middle East Technical University, Physical Education and Sports Dept.

P165 **Movements and Training**
SOME PERFORMANCE PARAMETER CHANGES DURING MENSTRUAL CYCLE PERIODS OF ATHLETES AND NON-ATHLETES
* Osman İmamoğlu, ¹Necip Fazıl Kışalı
* Ondokuz Mayıs University, Yaşar Doğu School of Physical Education and Sports
¹ Atatürk University, School of Physical Education and Sports

9:30-10:00 Group F Moderator: İlhan Odabaş

P176 **Movements and Training**
POWER AND STRENGTH LEVELS OF ELITE FEMALE VOLLEYBALL PLAYERS
* Gülbin Rudarlı Nalçakan
* Ege University Department of Physical Education and Sport

P177 **Movements and Training**
BLOOD PRESSURE RESPONSES TO SUPRAMAXIMAL EXERCISE
* Hilmi Karatosun, ¹Ahmet Koyu, ²Metin Lütfi Baydar
* Süleyman Demirel University, Department of Sports Medicine
¹ Süleyman Demirel University, Department of Physiology

P178 **Movements and Training**
THE EFFECTS OF THE CODING OF NUMERIC-VERBAL EXPRESSIONS AND MEANINGFUL VERBAL EXPRESSIONS INTO MEMORY ON THE LEARNING OF THE COMPLEX ARM MOVEMENTS
* Emel Taşkıran, ¹Figen Altay, ¹Giyasettin Demirhan
* Hacettepe University School of Sport Sciences and Technology
¹ School of Sport Sciences and Technology

P179 **Movements and Training**
EFFECTS OF 12 WEEKS GAME AND NO-GAME ATHLETISM TRAINING ON PHYSICAL APPROPRIATENESS OF MALE CHILDREN DOING ATHLETISM
* Yüksel Savucu, Y. Polat
* M.U., School of Physical Education and Sports

P180 **Movements and Training**
ENERGY CHANGES AT LAST FOUR STRIDE AND TAKEOFF FOR TWO DIFFERENCE LONG JUMP PERFORMANCE
* Emel Çetin, ¹Özgür Özdemir
* Akdeniz University

10:30-11:00 Group A Moderator: Gül Tiryaki

P196 **Physical Education**
EVALUATION ISOKINETIC PERFORMANCE AND ANTHROPOMETRIC FEATURES OF NATIONAL DEAF BADMINTON SQUAD
* Enis Çolak, ¹Belgin Bamaç, ¹Tuncay Çolak, ¹Aydın Özbek, ²Semra Yumuk
* Kocaeli University Department of Physical Education and Sports
¹ Kocaeli University Faculty of Medicine Department of Anatomy
² National Deaf Badminton team of Turkey

P197 **Physical Education**
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* Figen Altay, ¹Burcu Mucur, ²Sevil Uludağ,
¹Giyaseddin Demirhan
* School Of Sport Sciences And Technology

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EVALUATION OF TEACHING PRACTICE EXPERIENCE WITH THE PERCEPTION OF PROSPECTIVE TEACHERS
* Şeref Çicek, M. Levent İnce
* Middle East Technical University, Physical Education and Sports Department

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* Fatma Çelik Kayapınar, ¹Nurper Özbar
* Marmara University, School of Physical Education and Sports

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INVESTIGATION OF FOOTBALL UNIT IN PRIMARY SCHOOL PHYSICAL EDUCATION
* Süleyman Murat Yıldız, ¹Sabahattin Deniz
* Muğla 75. Yıl Science School
¹ Muğla University, Faculty of Education

P201 **Physical Education**
COMPARISON OF ACTIVE LEARNING AND CLASSIC LEARNING METHODS IN PHYSICAL EDUCATION AND SPORT
* A. Dilşad Mirzeoğlu, ¹Uğur Doğan, ¹Fatih Efe
* Abant İzzet Baysal University
¹ Ministry of Education

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* Bilal Çoban, ¹Sebahattin Devccioğlu
* Firat University, School of Physical Education and Sports

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* László Tóth, ¹Kornél Sipos, ²József Bognár
¹ Semmelweis University, TF, Budapest

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* Hayri Ertan
* METU, Physical Education and Sports Department

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* Kenan Sivrikaya, ¹Ali Çağlayan, ¹Fehmi Çalık, ¹Mahmut Kahveci
* Kocaeli University, School of Physical Education and Sports, Department of Recreation
¹ Sakarya University, School of Physical Education and Sports, Department of Recreation

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* Fatma Çelik Kayapınar
* Marmara University, School of Physical Education and Sports

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* İbrahim Şahin, İnci Akan, Nurper Özbar, Emin Süel, Ertuğrul Gelen
* Marmara University School of Physical Education and Sports

9:30-10:00

Group I

Moderator: Atila Erdemli

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* Mehmet Tunçkol, *Mustafa Yaşar Şahin
* *Gazi University, School of Physical Education and Sports***P228****Health and Sports**

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*Aylin İlhan, *Dilşad Mirzeoğlu, *İbrahim Aktaş,
*Veysel Demir
* *Abant İzzet Baysal University, School of Physical Education and Sports*
* *Ministry of Education, Teacher of Physical Education***P229****Movements and Training**

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*Sultan Harbili, *Erbil Harbili, *Hülya Baybek
* *Hacettepe University, School of Sport Sciences and Technology*
* *Muğla University, Vocational School of Health Sciences***P230****Health and Sports**

THE GEOGRAPHICAL FACTORS HAVE INFLUENCE ON SPORT AND AS A RESULT OF THIS, THE VALUATION OF THE SPORT ACTIVITIES APPEAR IN ÇANAKKALE

*Rüştü İlgar, *Lale Orta
* *Çanakkale Onsekiz Mart University, Faculty of Education, Department of Geography*
* *Çanakkale Onsekiz Mart University, Faculty of Education, Department of Physical Education and Sports***P231****Behavioral Sciences**

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*Tahir Hazır, *Alper Aşçı, *Caner Açıkkada, *Emin Ergen, *Cevdet Tinazcı,
*Sinem Hazır
* *Hacettepe University, School of Sport Sciences and Technology*
* *Ankara University, Department of Sports Medicine*
* *Near East University, School of Physical Education and Sports***P232****Behavioral Sciences**

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*Süleyman Can, Erdil Durukan, Zekeriya Göktepe,
A. Naci Arıkan, Kadir Pepe
* *Muğla University, Faculty of Education*
* *Balıkesir University, School of Physical Education and Sports*
* *Süleyman Demirel University, Burdur Faculty of Education, Department of Physical Education and Sports*

9:30-10:00

Group J

Moderator: Nevzat Mirzaoğlu

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*Fatih Kılınc, *Arslan Kalkavan, *Yalçın Taşmektepligil, *Yücel Ocak
* *Dumlupınar University, School of Physical Education and Sports***P257****Behavioral Sciences**

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*Turhan Toros
* *Pamukkale University, School of Sport Sciences and Technology***P258****Physical Education**

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*F. Yaylaçlı, *İ. Orhan, *B. Orhan, *E. Örs
* *Akdeniz University, School of Physical Education and Sports***P259****Movements and Training**

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*Ercan Cetinus, *Murat Uzel, *Erkal Bilgiç,
*Ahmet Karaoğuz, *Mutlu Uzun, *Hasan Ekerbiçer,
*Yakup Gümüştalan
* *University of Sütçü İmam, Faculty of Medicine Department of Orthopedics*
* *University of Gaziantep, Institute of Health, Physical Education and Sports Sciences*
* *University of Sütçü İmam, Faculty of Medicine Department of Public Health*
* *University of Sütçü İmam, Faculty of Medicine Department of Anatomy***P260****Adapted PE**

THE ANALYSIS OF IMPROVEMENTS OF MACRO PERIOD FLEXIBILITY TRAINING ON THE 10-14 AGE GROUP EDUCATABLE MENTALLY HANDICAPPED CHILDREN

*Süleyman Kestek, *Serkan İbiş, *Gürkan Yılmaz,
*Tarkan Sevindi
* *Şehit Jandarma Er Ferhat Doğan Primary School*
* *Gazi University, Institute of Health Sciences***P261****Adapted PE**

THE VISUAL REACTION TIME COMPARISONS OF AUDIALLY HANDICAPPED CHILDREN

*Tarkan Sevindi, *Serkan İbiş, *Gürkan Yılmaz,
*Kadir Gökdemir
* *Gazi University, Institute of Health Sciences*
* *Şehit Jandarma Er Ferhat Doğan Primary School*
* *Gazi University, School of Physical Education and Sports***P262****Movements and Training**

INDIRECT RESEARCH OF WEIGHT OF ONE REPETITION MAXIMUM IN BENCH PRESS TECHNIQUE

*İbrahim Ümrân Akdağçık
* *Niğde University, School of Physical Education and Sports***P263****Movements and Training**

THE EFFECT OF 8 WEEKS INTENSIVE STRENGTH TRAINING SOME PHYSIOLOGICAL AND PHYSICAL PARAMETERS 14-16 AGE MALE

*V. Çetinkaya, *M. Yalçın,
* *Akdeniz University, School of Physical Education and Sports***P264****Movements and Training**

THE EFFECTS OF 8 WEEKS PLYOMETRIC TRAININGS SOME PHYSICAL AND MOTORIC PARAMETERS IN INDIVIDUALS

*V. Çetinkaya, *M. Yalçın,
* *Akdeniz University, School of Physical Education and Sports*

**ORAL & POSTER
PRESENTATIONS**
s u m m a r y



S001

Behavioral Sciences**DIRECTION AND INTENSITY OF PERFORMANCE ANXIETY AMONG ELITE- AND NOVICE ATHLETES*** Ben Steyn, *Roelie Potgieter* University of Pretoria

Objective: The purpose of this study is to determine the differences in performance anxiety among elite- and novice athletes in terms of the direction and intensity of performance anxiety. Direction implies the ability to perceive and interpret anxiety symptoms as facilitating (constructive and positive for performance) or debilitating (negative and destructive for performance) for performance in sport. Differences in intensity levels of performance anxiety (how much anxiety the athlete experience) among elite- and novice athletes are also investigated in this study.

Methodology: The survey methodology was used in this study. Two questionnaires were used, namely the Competitive State Anxiety Inventory-2 (CSAI-2) as well as one self-developed questionnaire that assess the athlete's perceptions and interpretations of anxiety systems. Elite athletes (N = 25) and novice athletes (N = 25) completed the CSAI-2 questionnaire as well as a self-developed questionnaire a day before an important competition. Descriptive statistics were applied and the data were analyzed through the usage of descriptive frequency tables.

Results: Results indicated a statistically significant difference in the direction as well as the intensity of performance anxiety between elite- and novice athletes. In terms of direction of performance anxiety, significant differences were found between the elite- and novice athletes. The elite athletes scored significantly higher on the direction questions than the novice group. This indicates that elite athletes perceive the symptoms of anxiety as performance facilitating. The results in the CSAI-2 questionnaire indicate that the elite athletes also scored significantly lower on cognitive state anxiety as well as somatic state anxiety and higher on the state self-confidence scale than the novice athletes.

Conclusions: Researchers in the field of performance anxiety have mostly looked at the intensity of performance anxiety. A recent creative development is also to incorporate the direction of performance anxiety. To perceive and interpret anxiety symptoms as facilitating or debilitating is crucial and certainly has practical implications for the athlete.

S002

Behavioral Sciences**PERCEPTIONS OF PARENTS IN AN ETHICAL SITUATION: A CASE STUDY IN RSA SPORT*** Gerrie Van wyk, *Ben Steyn* University of Pretoria

Objective: Modern sport is ultra-competitive and puts pressure on elite athletes to perform on a high level of competence. Elite youth sport is also confronted with ethical dilemmas(1). Perceptions of parents in sport ethical dilemmas of their child are often under-reported. The primary aim of this study is to elucidate perceptions of parents whose child was found guilty of the use of performance-enhancing substances in an elite sport situation.

Methodology: The study was approached from an edu-ethical perspective and a case study was selected to observe, understand and interpret the data in the given context, attempting to

establish cause and effect(2). The uniqueness of this case lies in the fact that the subject was a 14-year old track-and-field female sprinter and to date the youngest athlete in the world ever to be found guilty of using prohibited substances. Data were recorded by means of a semi-structured interview following the methodology of Giorgi (1970) and Wertz (1985) and described and interpreted in two sections: the parent's general perception of sport achievement and the events relevant to the case.

Results: Results from the first phase of interpretation indicate parents favouring sport achievement but not as the primary outcome of participation. A degree of misinformation and disinterest regarding the use of prohibited substances was evident at the start of the subject's elite sport career. The second phase of the description of perceptions differ in range and intensity and the parents of the subject characterized it as affectively aversive. A base-line concept was the conviction to uncover the truth at all costs.

Conclusions: Parents are prominent in children's participation in elite sport. In this case the use of prohibited substances resulted negatively on all role players. This case reiterated that elite youth sport remains in essence a didactical and pedagogical situation and should be practiced as such. Pro-active and consequential actions are advised to establish a pedagogically sound perspective on the nature of the achievement motive and on the use of prohibited substances in elite youth sport.

S003

Coaching**COMMUNICATION, COHESION AND MENTORING OF COACH - ATHLETE RELATIONSHIP: ARE THEY IN TUNE?*** Mohar Kassim* Researcher, Loughborough University, United Kingdom

The importance of the relationship between a coach and athletes if often overlooked during training and competition until a negative incident occurs. In fact, many researchers feel that this relationship is what stems a victorious season and encourages athletes to continue a career in particular sport. Throughout this paper, I will attempt to introduce those conceptual analysis and theories related to coach athletes relationship. Coach and athlete relationship is one of the most important factors towards excellent achievement within a team setting. These results support the athletes may focus on different performance cues to those of coaches and the coach perspectives is that of the involved observer, the athletes perspectives standard from an internal views. This paper will conclude by offering suggestions for coach and athlete towards to create mutual understanding and reduce the potential conflict.

S004

Behavioral Sciences**DEMOCRATIC AND POSTMODERN VALUES IN SPORT AND PHYSICAL EDUCATION*** Nam ki Cho* Sookmyung Womens Univ.

Mass production and consumption represents the industrialized and modernized society, and democracy has been defined as the way of our life within being mass in these days. Thus, it is certain

that how democracy, the contemporary way of life and philosophy, is defined influences how we perceive sport and PE.

By the time mass production and consumption and public benefits were emphasized, rationalism and democracy began prosperous. They were founded on scientific beliefs that have been mainly established on Descartes' and Newton's world view-nature is in the uniformity of its simple symmetry and within linear and causative relations. In sport and PE, command, regulations, discipline, persistence, and obedience were highlighted and sought along with this being mass, rational, and democratic in this modern culture. Efficiency or effectiveness in social sport and PE was the ultimate value that was praised and pursued at the time of behaviorism that focuses on linear relations of stimulation-response and that claims effective physical training based on discipline, obedience, and persistence.

Einstein's theory of relativity, discovery of black hole, and other explanation-incapable findings in science have made us skeptical and suspicious of all the pre-existing knowledge welcome in modern times. Uniformity began fading away and replaced by chaos-like diversity. Unbalance and asymmetry started booming up in this society. So-called "Postmodernism" is characterized with diversity, indeterminacy, transformation, internal direction, and self-generation. Accordingly, democratic values such as active participation, diversity and individual rights rather than discipline, persistence, and obligation have been emphasized. Sport and PE began adjusted to this postmodern paradigm as well. People's various needs in social sport and learners' diversity in PE have been at the center of our interests. It is based on our consensus that self-generated guidance is more powerful than discipline-based force for active participation in social sport and for achievement in PE.

This study looks at where this paradigm comes and goes in sport and PE. It helps us anticipate what and how we manage this paradigm in sport and PE. It is also expected that this study helps us catch a glimpse of the way on which sport and PE track in the future and overcome crises with which sport and PE have confronted.

S005

Health and Sports

STUDY OF LOW-BACK PAIN AMONGST CYCLISTS

* Reza Rajabi

* Tehran University

Back pain affects millions of people. It affects 80% of the population and up to 52% at any given time. Back pain is not limited to sedentary individuals; it has significant effects on athletes as well. Depending upon the sport, incidence rates of back pain occur in athletes from 1.1% to as high as 30%.

In cyclists spinal column is used in an unusual position. As this position, especially in endurance cyclists, is often sustained for up to eight hours per day and repeated daily for many years, this might lead to some problem in spine and may result in pain. Based on the review of literature, existing research into the topic investigated in this study is limited.

The propose of this study was to investigate whether the prevalence of low-back pain differs amongst cyclists and non-cyclists. In total, 240 male subjects 120 cyclist and 120 age matched non-cyclists were investigated. Each selected cyclist had to meet a minimum criterion of 5 years cycling.

Results of the showed that the prevalence of low-back pain was high amongst cyclists group (44.2%). The results of the study

also indicated that the rate of low-back pain amongst cyclist was higher than their age matched non-cyclist group (26%). This finding is in agreement with the result of Salai et al. (1999) and Callaghan and Jarvis (1996) which reported the prevalence of low-back pain as 30-70% and 60% amongst cyclists respectively.

One of the possible causes of low-back pain amongst cyclists especially those using lower handlebar bicycles and ride for longer duration might be the back's erector spinae muscles that are in a chronic state of isometric contraction during cycling in a flexed position. While riding, most of the muscles that support or maintain the back position contract isometrically. Continued isometric contractions limit blood flow to the muscle, causing a lack of oxygen and intracellular shortage of potassium in the area; consequently, a painful ischemic response and even secondly spasm may develop. Additionally, metabolic waste products may accumulate in these muscles and exacerbate the pain. However, it remains unclear whether low-back pain amongst cyclists associated more with muscular factors or degenerative lumbar disc, spondylytic stress lesions etc. To clarify this prospective radiographic studies are needed to make more sense of the current results.

S006

Health and Sports

C34T AMPD1 GENE POLYMORPHISM IN YOUNG ATHLETES

* Olga Fedotovskaya, *Irina Astratenkova, *Victor Rogozkin

* Research Institute of Physical Culture

Objective: There is an evidence that athletic performance is influenced by genetic factor.

The skeletal muscle isoform of adenosine monophosphate deaminase (AMPD, EC 3.5.4.6) is activated during short-term, high-intensity exercise when the rate of ATP utilization exceeds the potential of the cell to resynthesize ATP. This enzyme might be an important regulator of muscle energy metabolism during intense exercise in human. The skeletal muscle-specific isoform M of the AMPD is encoded by the AMPD1 gene. C34T polymorphism of AMPD1 gene has been shown to determine an exercise capacity and cardiorespiratory response to exercise.

We hypothesized that power athletes have mutant T allele in their genotype less often than endurance athletes.

This study was undertaken to find out whether there is a difference in AMPD1 genotype distribution between power and endurance athletes.

Methods: There was examined the DNA of 48 male and 2 female (age: 20,3±3,5) power athletes (PA) and 80 male (age: 19,6±2,8) endurance athletes as control group (CG). DNA was isolated from cells of buccal epithelium. To detect the C-to-T transition at nucleotide 34 in exon 2 of the AMPD1 gene this region was amplified using two-primers PCR-method. Amplified fragments were analyzed by restriction analysis. Then products were separated by 8% polyacrylamide gel electrophoresis with following coloration by etidium bromide and visualization in ultraviolet light.

Results: We examined genotype distribution of the AMPD1 gene among PA and CG. There was a significant difference (P=0,05) in genotypic (PA: CC=80%, CT=18%, TT=2% and CG: CC=68%, CT=30%, TT=2%) and allelic (PA: C= 89%, T=11% and CG: C=83%, T=17%) frequencies in this two groups.

S007

Health and Sports

ALFA-ACTININ-3 GENE POLYMORPHISM IN YOUNG ATHLETES

* Anastasiya Druzhevskaya, *Irina Astratenkova,
*Victor Rogozkin

* Research Institute of Physical Culture

Objective: There is increasing evidence for strong genetic influence on athletic performance. The α -actinin-3 has been reported to play an important role in skeletal muscle differentiation, regulation and static function as a major structural component of the Z-line. Approximately 16% of the world population is predicted to have congenital deficiency of protein α -actinin-3 because of homozygosity for common stop-codon polymorphism (577XX) in the α -actinin-3 (ACTN3) gene. The aim of this study was to investigate the role of ACTN3 genetic polymorphism in power oriented young athletes.

Methods: We examined the DNA of 97 male athletes (YA) involved in different power sports with training history of at least 5 years (age: $18 \pm 1,4$) and 111 male control group (CON). The DNA was isolated from cells of buccal epithelium. R577X ACTN3 polymorphism was genotyped by PCR method using two primers. Amplified fragments were digested by restrictases. Digested products were separated by 8% polyacrylamide gel electrophoresis with following coloration by etidium bromide and visualization in ultraviolet light.

Results: We therefore examined distribution of ACTN3 alleles in YA and CON. There was no significant difference in allelic frequency between groups (YA: R=63%, X=37% and CON: R=60%, X=40%). The difference was shown in genotypic frequency (YA: RR=33%, RX=60%, XX=7% and CON: RR=38%, RX=45%, XX=17%) (Fig.1). Analysis has revealed a trend of decreasing XX genotypic frequency at YA group.

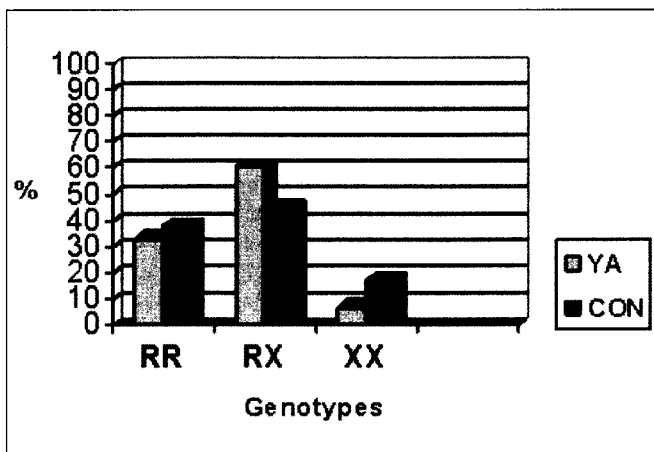


Fig.1. Distribution of ACTN3 genotypes

Conclusion: Distribution of ACTN3 genotypes among athletes and its comparison with control subjects shows natural selection of athletes whose muscles had not contained α -actinin-3 (577XX polymorphism). There is significant association between ACTN3 genotype and athletic performance. We have found out evidence that protein α -actinin-3 coded by ACTN3 gene may play role in the development of power in highly trained athletes. The results indicated great importance of genetic analysis for selecting of young athletes in professional sport.

S008

Management And Organization

COMPETENCE RESEARCH IN SPORT MANAGEMENT

* Kaiser Sebastian

* German Sport University Cologne - Institute of Sport Economics and -Sport Management

Objective: The paper seeks to give an overview of sport management competence research in Germany and show implications for adequate curriculum design. Within a critical point of view the methodological and theoretical framework and the demand for further research activities will be discussed. The main research objective is to expand and differentiate the knowledge of the competencies of sport managers in order to optimize vocational qualification.

Methods: Occupational areas of german sport managers have been studied in a set of projects along the for profit, the non profit and the public sector. Following the idea of Competency-Based Education (CBE) and contrary to the (prescriptive) Classical School of Management "the method involves identifying competencies or composite skills in practice and then relating them to the training and education needs of students and personnel". The main method of data acquisition was questioning the test persons individual assessment of the meaningfulness of several activities and competencies for their professional practice using standardized questionnaires. Analyzing the entire data, several implications for adequate curriculum-design can be derived:

Results: Sport management appears as practice of a basic canon of activities and segment-referred (special-) competencies. In a comparative intersectoral perspective significantly different profiles show up. With cluster analysis performance patterns beyond the main sport management sectors can be revealed empirically.

Conclusion: The findings indicate that a singular curriculum cannot properly fit the demands of all future sport managers. On the other hand special ("one track") curricula for certain groups and/or sectors do not necessarily have to be offered, modularization seems to be the optimal approach. A modification of existing sport management education with a special emphasis on some specific contents is appropriate.

S009

Management And Organization

NEW PUBLIC MANAGEMENT AND THE COMMUNITY SPORT DEPARTMENTS IN GERMANY. AN EMPIRICAL ANALYSIS OF EXTENT, TYPES AND SUCCESS OF MANAGEMENT REFORM

* Schütte Norbert

* German Sport University Colon / German Students Sport Federation

Objective: The German sportsystem is mostly based on local sportclubs. A very important helper of the sportclubs are the municipal sport departments. Since 1990 the management of municipal sport departments has been under a lot of pressure. The most import one is the growing financial crisis of the state, that reached Germany like other european countrys before. The crisis was not induced but increased by the reunion. Since then a number of single reform models have been presented. In spite of these up till now there has been no representative study of the changes that municipal sport departments have un-dergone. So it is necessary to answer this questions: To what extent and in

what ways are community sport departments changing in Germany and how successful are the different types?

Methods: The questions were examined using a number of research instruments: In depth interviews with scientists and representatives of the municipal sport departments federation (N=5; 1997-99).

Results: All reform elements can be put together in four types: 1. Liquidation and reorganization as a not state organization (Liquidation of the independent sport department / Combining departments / Transformation of the sport department into a business-like form) 2. Outsourcing and commercialization (User fees for clubs / Contracting out to commercial companies / Transformation of parts into businesslike forms / Renting or leasing or sales of sports facilities to sport clubs / Transfer of work to the municipal sports council) 3. New Steering Model: (Global budgeting / Cost performance analysis / Product definition / Controlling / Marketing), 4. Linking the departments with a computer network.

It is not easy to measure success. But combined with the perception of the growth of success, some significant correlation could be found.

Conclusions: The reform movement has reached the local administrations in a very recognizable way. Four types of reform could be identified. There are significant correlations between the growing success and the new steering model. "Outsourcing and commercialization" correlates even with the growing success. This means, that in general the realization of these reform elements shows successful results. Not successful in general are the reform models of liquidation and reorganization as a not state organization as well as the linking the departments with a computer network.

S010 Movements and Training

CHARACTERISTICS OF LOADS DURING COMPETITIVE ROWING

* Bachev Vihren, *Neykov svilen Svilen

* NSA, Theory of sport, Sofia, Bulgaria

Introduction: There are two sides of competitive and training loads - outside and inside (Godik 1980, Zeljazkov 1998, Bomp 1999). The management of the training process for all types of sports requires quantitative and qualitative information about their characteristics.

Quantitative characteristics of outside and inside loads of elite Bulgarian women 1x rowers.

Parameters	Boat speed (m/sek)	Stroke rate	Distance	HR (beats per minute)	Blood LA concentration (mmol l ⁻¹)
		(number of cycles per minute)	duration of rowing cycle (m)		
X - average	4.09	33	7.49	193	12
X - minimum	4.04	31	6.88	188	8.7
X - maximum	4.15	35	8.05	198	14.2
S	0.263	1.414	0.320	3.288	1.874
V	6.3	4.3	4.22	1.7	15.6

A lot of experimental data was published about changes observed in each one of those parameters. Obtaining new information in this field is significant for the individualization of training.

Purpose and Method: The purpose of the study is to systematise and present some quantitative characteristics of outside and inside loads, measured during the competitive rowing of elite women and men sculler rowers.

Subjects of investigation were 18 elite Bulgarian and Turkish women (6) and men (12) sculler regular and lightweight categories rowers.

Experimental method included measurements of HR changes ("Polar's -S 810; S 710), blood lactate concentration, sports performances ("Speed-coach" timers), average boat speed, stroke rate, the distance rowing cycle duration, during 2000m. control, regional and national competitions. The data was statistically systematized (ANOVA) and as proportionally ratios and comparatively analyzed.

Results: One example of quantitative characteristics of outside and inside loads of elite Bulgarian rowers are presented on Table 1.

Discussions: Analyses of the results showed that the outside characteristics of loads are individual determined and limited. Of the other hand by different competitors, the HR changes during the competitive rowing were in range of 185 -200 beats per minute. The maximal score of 198 beats per minute has been found.

Taking into consideration the blood :LA concentration was in individual score of changes from 8.7 - 14.2 mmol l⁻¹ during 2000 m competitive rowing.

S011 Movements and Training

ACE GENOTYPE MAY HAVE AN EFFECT ON SINGLE SET VS MULTIPLE SET PREFERENCE IN STRENGTH TRAINING

* Muzaffer Çolakoğlu, ¹F. Sırrı Çam, ²Bülent Kayıtkent,

²Fırat Çetinöz, ²Şule Çolakoğlu, ²Mustafa Türkmen, ²Metin Sayın

* Ege University Department of Physical Education and Sports

¹ Celal Bayar University, Faculty of Med Dept. of Med. Biology and Genetics

² Celal Bayar University School of PE and Sports

Objective: The aim of this study was to investigate whether ACE genotype related with strength development in subjects using multiple or single set resistance training systems with 12-15 RM and 8-12 RM.

Methods: ACE genotype polymorphism of 99 Caucasian male non-elite Turkish athletes was analyzed by PCR-RFLP methods. Subjects were subdivided as single set (SSG; n=35), multiple set (MSG; n=33) and control (CG; n=31) group. One repetition maximum (1 RM) levels in ½ Squat and Bench Press were assessed. 12-15 RM and 8-12 RM were used in first and second mesocycles. Each mesocycle was three weeks in duration. Experimental groups trained three times a week for six weeks.

Results: Multiple set had an advantage on strength development in 12-15 RM while both setting system have similar effects in 8-12 RM in subjects with ACE II genotype. There was no difference in subjects with ACE DD genotype in both exercise load between single and multiple sets. It was seen that single set is efficient enough in strength gains for subjects with ACE ID genotype and exercising with 8-12 RM loads but not in 12-15 RM. Additionally, it was observed that DD genotype has an superior in gaining strength in both setting system.

Conclusion: ACE DD genotype found advantageous in strength development than others. Results showed that, resistance training with single set system efficient enough for strength gain in both 8-12 and 12-15 RM. On the other hand, single set system seems to be advantageous in 8-12 RM and multiple set systems in 12-15 RM in subjects with II genotype.

S012**Behavioral Sciences****COMPARISON OF MOTIVATIONAL DIMENSIONS AND ANXIETY LEVELS WITH STRESS SIGNS OF FOOTBALL COACHES THROUGH THEIR SPORTS LIFE**

* *Asaf Özkara*, Vesile Yılmaz, **Ziya Koroç*
* *Hacettepe University, School of Sport Science and Technology*

Objective: The purpose of the study is to identify comparison of motivational dimensions and anxiety levels with stress signs of football coaches through their sports life. 1065 coaches having age average of 39.81+8.31 participate in this study.

Methods: Coaches are administered The Competitive State Anxiety Inventory (CSAI-2), The Sport Motivation Scale (SMS) and get public survey ready for football coach. Collected data were analyzed using descriptive statistical, Pearson Product Correlation Coefficient and Multivariate Variance Analysis (MANOVA).

Results: There were significant differences between External Motivation { $F(6,1057)=4.107$; $p<0.001$ } and A motivation { $F(6,1058)=3.841$; $p<0.05$ } dimensions of coach's according to their education levels. There were significant differences between External Motivation { $F(6,1057)=4.192$; $p<0.001$ } and A motivation { $F(6,1058)=3.561$; $p<0.05$ } dimensions of coach's according to their levels of team. Results showed that, education levels of coaches were increased however External Motivation and A motivation were decreased. There were positively significant relationships between coach's Somatic Anxiety levels and physical disability of coaching periods { $r(1048)=.463$; $p<0.05$ }. There were positively significant relationships between coach's Somatic Anxiety levels and have an illness of coaching periods { $r(1023)=.167$; $p<0.05$ }. There were positively significant relationships between coach's Cognitive Anxiety levels and physical disability of coaching periods { $r(1048)=.235$; $p<0.05$ }. A total of 65.6% coaches reported that they had a stomach illness and a total of 57.7% coaches said that they showed stress signs during their sports life.

Conclusion: As a result, the coaching profession was contain a stressful life and there were significant relationships between coach's education levels with External Motivation and A motivation levels.

S013**Behavioral Sciences****TURKISH ADAPTATION OF A CHILDREN'S FORM OF THE COMPETITIVE STATE ANXIETY INVENTORY: CSAI-2C**

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Objective: The purpose of the study was to adaptation of "A Children's Form of The Competitive State Anxiety Inventory" (CSAI-2C) for 8-12 aged Turkish children.

Methods and Results: For this reason, four studies were doing. The purpose of the first study was to translate inventory of Turkish version. The second study was to examine test-retest reliability. A total of 20 (age mean=11.43+1.32) female rhythmic gymnastics players in ODTÜ team participated in to this study. Inventory was applied, and test-retest reliability for 3 weeks intervals for Cognitive Anxiety was .87, for Somatic Anxiety was .98 and for Self Confidence was .98. A total of 7 National Female Rhythmic Gymnastics Team players participated in third study.

Athletes mean age was 11.57+0.90 year. The purpose of the study is to identify what kind of changes a athletes experience, 2 days before, a day before, 2 hours before and 20 minutes before and 2 hours and a day after the competition in competitive anxiety and its components. As the competition time come closer, athletes' cognitive and somatic anxiety scores increases and self confidence scores decreases. After the competition while cognitive and somatic anxiety scores decreases, self confidence scores increases. Results show that, state anxiety measured with CSAI-2C and anxiety components changes after and before the competition. This result to show that a structure validity of inventory. A total of 169 child athletes, 75 males and 94 females participated to the fourth study (age mean=11.08±1.16). Principle component Factor Analysis with Varimax rotation for original inventory supported 3 factors and explains %52.57 of variance. The Cronbach Alpha internal consistency value for Cognitive Anxiety was .80, for Somatic Anxiety was .87 and for Self Confidence was .85. The Cronbach Alpha internal consistency for total inventory was .89.

Conclusion: As a result, the obtained results on Turkish adaptation of CSAI-2C show that CSAI-2C is usable test for 8-12 years female and male Turkish children's.

S14**Behavioral Sciences****AN INVESTIGATION OF RISK PERCEPTION AND RISK VIEWS OF MALE AND FEMALE UNIVERSITY STUDENTS BEFORE AND AFTER PARTICIPATING THE OUTDOOR ACTIVITIES EXPERIENCE**

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Objectives: The purpose of this study was to determine the views of university students about risk and their perception of risk in outdoor activities before and after experiences.

Method: 24 female ($M=21.88 \pm 1.73$) and 28 male ($M=22.39 \pm 1.81$) sport sciences university students were voluntarily participated in this study. Students participated six day summer outdoor activities in which include backpacking, wilderness camping, trekking and summit climbing. Quantitatively "The Perception of Outdoor Activities Scale" which measures the perception of risk ($r=.73$), attractiveness ($r=.74$) and possible participation levels ($r=.69$) of university students were administered to all participants before and after experiences. In addition, qualitative methods also used and participants were asked to keep structured camp diary for four days, which includes questions about their perceptions of all day outdoor activity.

Results: 2 x 2 (Time x Sex) ANOVA with repeated measures on the perception of risk and possible participation levels revealed no significant main effect for time ($F=0.29$; $p>.05$; $F=.64$; $p>.05$). However, significant time main effect was obtained for the attractiveness level ($F=6.46$; $p<.01$). The mean attractiveness level increased after participating patipation. ANOVA results also indicated no significant sex differences in attractiveness level ($F=.00$; $p>.05$) and possible participation level for activities ($F=0.27$; $p>.05$) between males and females. Significant sex main effect was obtained for the perceptions of risk level ($F=7.25$; $p<.01$) in favour of males. 2x2 ANOVA with repeated measures showed no significant time by sex interactions on the perception of risk, attractiveness and possible participation levels of outdoor activi-

ties ($F=0.29$; $p > .05$; $F= .00$; $p > .05$; $F=.01$; $p > .05$). The data obtained from diaries was sorted into risk perception and risk experience themes. Most of the participants expressed that are related to both emotion (fear, excitement, courage) about risk perception and action (take the chance of everything, make decision, to be folded all outcomes). Regarding to the theme of risk experiences, nearly half of the participants reported that they experienced risk in outdoor activities and these experiences had an influence on their risk perceptions.

Conclusion: The findings indicated that females have high risk perception than males and six days outdoor activities experiences increased the attractiveness of outdoor activities.

S015 Movements and Training

IS THE ACE DD GENOTYPE ASSOCIATED WITH A BETTER ENDURANCE PERFORMANCE?

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Objective: Previous studies have shown that the ACE gene I/D polymorphism may be related with a better endurance performance and a stronger response to exercise training. We aimed to study the association between ACE gene polymorphism and athletic performance in a homogeneous cohort.

Methods: ACE gene polymorphisms of 88 male non-elite Caucasian Turkish athletes with similar training backgrounds for at least for six months were analyzed by PCR-RFLP methods. Sixty-meters sprint and 2000-m running tests were applied to subjects as performance criterions.

Results: ACE I/D genotypes distributions were 20,5%; 40,9%; 38,6% for II, ID and DD polymorphisms of subjects (n=88), respectively. The ACE DD genotype frequency was significantly higher in superior group (56,7%) than the poor (37,9%) and mediocre (20,7%) group in middle distance running $2=11.778$; $p=0.019$).

Conclusion: ACE DD genotype may be related with better short duration aerobic endurance performance.

S016 Sports Nutrition

EVALUATION OF SOME HEMATHOLOGICAL OUTCOMES AND PERFORMANCE OF NUTRITION EDUCATION THAT WAS GIVEN TO ARCHERY TEAM IN SAMSUN DISTRICT

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Objective: The aim of study was to examine the effect of sufficient and balanced nutrition programme on the archers performance and blood parameters.

Methods: 14 archers participated the study. The measurements were taken in the outdoor season. The archers shot 30 arrows from 70 meters and their shooting points were determined, a questionnaire was given to determine the nutritional habits. Before the first measurement, three-day food intake of archers were taken by dietitian, and the blood parameters (Hb, Hct, Fe, ferritin, iron binding capacity), glucose levels, antropometric measurements of the archers were determined. An appropriate nutrition programme was given to archers. The archers applied this programme for 2 months and the all measurements were taken after 2 months.

Results: According to results of the three day food intake and the questionnaire, it has found that the archers didn't eat the foods at recommended levels, it has found that they didn't know enough information about nutrition. When the blood parameters were compared all the archers before nutrition programme and after nutrition programme, significantly differences were found ferritin levels ($p < 0,01$). The Hct levels were determined of women archers significantly differences after nutrition programme than before ($p < 0,05$). The glucose levels of the first series were determined significantly different between the before and after nutrition programme. ($p < 0,05$) When the tree-day food intake were compared before nutrition programme and after nutrition programme significantly differences were found simple carbohydrate purchase, carbohydrate percentage, fat percentage, vegetable origin iron, cholesterol and vit E. ($p < 0,05$)

The shooting points were significantly increased after nutrition programme than before ($p < 0,05$).

Conclusion: The aim of study shows the importance of nutrition for the performance archers.

S017 Movements and Training

ACE GENE POLYMORPHISM, SINGLE AND MULTIPLE SET RESISTANCE TRAINING AND CHANGES IN LEAN SOFT TISSUE MASS

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Objectives: This study was planned to investigate differences in lean soft tissue mass gains in single or multiple set resistance training groups composed of subjects with ACE II, ID and DD genotypes.

Methods: ACE gene polymorphisms of 42 male non-elite Caucasian Turkish athletes were analyzed by PCR-RFLP methods. Dual Energy X-ray Absorbsiometry (DEXA) analysis used to investigate lean soft tissue mass and body weight. Subjects were subdivided to single set (SSG; n=14), multiple set (MSG; n=13) and controls (CG; n=15) randomly. Subjects in both experimental group was completed a six weeks resistance training programme with a training frequency of three times per week while controls continue their normal daily activities.

Results: There was no difference in lean soft tissue mass alterations amongst ACE II, ID and DD groups as subgroups of SSG and MSG and CG. Subjects with ACE II genotype in SSG and CG had a

significant increments in lean soft tissue ($p < 0.05$ for both group), but there was not any difference in MSG. Conversely, subjects with ACE ID genotype in MSG showed significant gains in this variable. On the other hand, subjects with ACE DD genotype in both SSG and MSG is found to have significant gains ($p < 0.05$) in lean soft tissue mass but no alteration in CG.

Conclusion: Our results did not show any association between ACE genotype and lean soft tissue mass alterations as response to single set or multiple set resistance training systems. Further studies with wider populations may help to clarify this issue.

S018

Health and Sports

INFLUENCING FACTORS TO LIFE SATISFACTION OF ELDERLY LIVING IN NURSING HOMES

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In this study, the predictor factors to life satisfaction and mental status of elderly living in The Istanbul Main Municipality Nursing Home was examined under the project titled with Active Aging Project. According to the linear regression analysis, the predictors of life satisfaction index (LSI-A) scores are to involve with regular physical activity or sports ($p = 0.016$). The results also showed that age was negatively correlated with mental health. Low and medium level of income, regular exercise or sports habits and being a male were the predictors of higher mental health score ($p = 0.05$, $p = 0.005$, $p = 0.00$).

In conclusion, the life satisfaction and mental status of elderly were closely affected by having a regular income and physical activity or sports habits.

S019

Health and Sports

THE EFFECTS OF SALIVARY IGA LEVELS ON SUSCEPTIBILITY OF UPPER RESPIRATORY TRACT INFECTION IN SWIMMERS

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Objective: There is a general perception among athletes, coaches and team doctors that athletes are susceptible to infectious diseases, such as upper respiratory tract infections, during intensive training periods. Many studies focused on the relationship between immune parameter changes in exercise and susceptibility to infections. In our study, we tried to evaluate the alterations in salivary IgA levels with exercise and their effect on susceptibility of upper respiratory tract infection.

Methods: We evaluated 25 healthy (12 male, 13 female) swimmers, whose ages between 15-22. Saliva samples were collected before, just after and 1 hour after the exercise and a self assessment form was given to swimmers in order to follow up the up-

per respiratory tract infection (URTI) for 2 weeks. Immunodiffusion method was used to assess the salivary IgA levels.

Results: In 7 of 25 swimmers, URTI was observed in 2 weeks of follow up. While there was no significant difference in pre-exercise salivary IgA levels between upper respiratory tract infection positive (URTI +) and negative (URTI -) groups, post-exercise salivary IgA levels were significantly different. Salivary IgA level of samples which is collected just after the finish of exercise (IgA-F) was 6.03 ± 2.09 mg/dl in URTI (+) group and was 11.99 ± 6.46 mg/dl in URTI (-) group ($p = 0.01$). Also salivary IgA level of samples which is collected 1 hour after the finish of exercise (IgA-1h) was 3.30 ± 1.15 mg/dl in URTI (+) group and 13.88 ± 8.43 mg/dl URTI (-) group ($p < 0.001$).

Conclusions: In our study we observed that swimmers who are susceptible to URTI have a decreased post exercise salivary IgA levels and we concluded that monitoring the immune parameters of swimmers during the training period could be beneficial to evaluate the URTI risk.

S020

Sports Nutrition

CUMULATIVE EFFECTS OF CONJUGATED LINOLEIC ACID AND EXERCISE ON BODY COMPOSITION, SERUM LIPID PROFILE, INSULIN, LEPTIN AND GLUCOSE LEVELS

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The purpose of this study was to evaluate the occurring effects of conjugated linoleic acid (CLA) supplementation and aerobic exercise (Ae) concurrently on body composition and serum lipid profile in humans. Forty four healthy female students from the School of Physical Education attended to study as voluntary subjects. Subjects were divided four groups as Ae, CLA, AeCLA and Controls (C) basis on the equality of baseline physical values of the groups. The groups of CLA and AeCLA were supplemented with 3,6 g/d CLA for six weeks. AeCLA and Ae groups were exercised for at least 30 min per day and three times per week for six weeks. Body fat ratio, fat mass, and waist and hip girths were significantly reduced in all experimental groups and fat-free mass induced in AeCLA and CLA groups when compared to controls. Improvements in physical parameters were higher when exercise and CLA supplementation applied simultaneously. There was no change in serum leptin, apo A, apo B, total cholesterol, HDL, LDL, free fatty acid, and triglyceride levels. Surprisingly, serum glucose levels of AeCLA and CLA groups and insulin level of AeCLA group decreased significantly. However, only serum glucose levels of AeCLA and CLA were significantly different than 2= 8,818; $p = 0.032$). These results have shown that both CLA + those of controls (and exercise were effective in improvement of body composition and these effects were cumulated when they have been used together. On the other hand, it was observed that CLA supplementation alone or with exercise seems effective on serum glucose and insulin.

S021 Behavioral Sciences S023 Management And Organization

THE EFFECTS OF MOTIVATIONAL VARIABLES ON COGNITIVE STATE ANXIETY, SOMATIC STATE ANXIETY AND SELF-CONFIDENCE

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The purpose of this study was to investigate the effects of motivational variables on cognitive anxiety, somatic anxiety and self-confidence. The participants were 312 athletes from a wide variety of sports. The age mean of the sample was 21.59 ± 2.39 .

Motivational variables were assessed using "Sport Motivation Scale" and "Task and Ego Orientation in Sport Questionnaire". "Competitive State Anxiety Inventory" was used to determine cognitive anxiety, somatic anxiety and self-confidence levels.

To examine whether motivational variables could be considered significant predictors of competitive anxiety, a stepwise regression analyses were conducted. The results revealed that amotivation were significant predictors for cognitive state anxiety, somatic state anxiety and self-confidence. For somatic state anxiety and self-confidence, gender was significant predictor. Extrinsic motivation predicted self-confidence, negatively. The findings indicate that motivational variables may be conceived as predictors of competitive anxiety.

S022 Movements and Training

EVALUATION OF ARCHER'S SKILL: AN EMG STUDY

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Surface EMG signals of m. flexor digitorum superficialis (MFDS) and m. extensor digitorum (MED) were recorded of 23 subjects during archery shooting. Two-second periods (clicker falls at 1th sec) of 12 shots' EMG data were recorded, rectified and averaged (moving average filter) for each subjects. Thirteen of 23 of the subjects were elite and beginner archers, while rest is non-archers. Intra-archer mean value (IAMV) / standard deviations (IASD) of cross-correlation coefficients (CCCs) were calculated for each archer. We call this index as SIS (Skill Index of Similarity). Student's unpaired t-test was used to compare archer and non-archer's mean SIS values for MED and MFDS. The difference between group means was statistically significant for MED ($p < 0.02$) and MFDS ($p < 0.03$). The results suggest that when archery experience increases archers contract their MED or MFDS more similarly since archer's SIS values are higher than non-archers. So SIS may be a good candidate for a) assessing shooting techniques b) evaluation of archers' progress, and c) selection of talented archers. Furthermore, probably this index or its derivatives may be useful in other sport areas for a) assessment of techniques b) progress evaluation, and c) selection of talented.

A SURVEY TO DETERMINE THE ATTITUDES OF SPORTS JOURNALISTS AND REPORTERS IN REGARDS TO THE PRESENTATION OF VIOLENCE AND FAIR PLAY

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The aim of this study is to investigate the influence of sports journalists on violence and fair play in football, to analyze newspaper news and declarations by football managers, coaches and players which are thought to be effective in tempting the spectators into violence or fair play and to give suggestions for solution. The scope of this survey involves the sports columnists and reporters of national newspapers. Its respondents are 131 persons casually selected among the members of the Association of Turkish Sports Journalists. Totally 106 questionnaires were evaluated. In addition, a questionnaire consisting of 24 questions was carried out in order to determine to what extent various reference groups are effective on spectators' violence as well as the demographic information of the journalists. The questionnaire was prepared with the help of some experts and delivered by the questionnaire appliers assigned. The reliability of the questionnaire was tested by the Cronbach Alpha technique through its pilot application to 70 sports journalists and its inner coefficient consistency was calculated to be 0.81. The frequencies and percentage distribution of the findings of the questionnaire were calculated and arranged in tables, their analyses being calculated. 91% of the sports journalists included in the survey are "male"; 35.8% are 46 years old or over, 57,5% have graduate degrees, 43.4% know a foreign language at intermediate level, 36,8% get a salary of 1.5 billion Turkish Liras or over. It was found out that their "completely agree or agree" responds to the question related to the influence of sports media on spectators' aggressiveness ranked so high as 86.8%. It was also observed that they responded "completely agree or agree" at a rate of 79.3% to the question as to the influence of sports media on fair play. As a result, while sports journalists and reporters believe that sports media have an impact on spectators' aggressiveness and fair play, the scores of the big teams and the players' social activities and events rather than their performance take coverage in print sports media due to the anxieties as regards the circulation. It can be claimed that while the news are presented in certain patterns with the aim of attracting the readers' (fans) attention, their psychological and social perceptions cannot be put on the agenda.

S024 Movements and Training

DISCRIMINATION OF WON AND LOST THE GAME IN FREE-STYLE WRESTLING

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Objective: Many objective and subjective factors may effect winning or losing the game in any sport match, however, technical-tactical variables are one of the measurable part in these factors. The purpose of this study was to discriminate won and lost the games in free-style wrestling matches according to technical and tactical elements.

Method: All matches (totally 141) of 2004 Senior Men Free-style Wrestling European Championship were examined from video-cassettes of 7 weight categories. The technical-tactical elements applied by the winner and loser wrestlers in the matches (209

elements) were notated to the scouting forms and then extra 130 elements were calculated by using the notated datas for statistical analysis. Won (G1) and lost (G2) games in the matches were differentiated with three separate models by Stepwise Discriminant Analysis with a significance level of $p < 0.05$. Model-1 was carried out on 48 types of successful techniques whereas Model-2 was executed on 48 total techniques applied in the matches. Model-3 was carried out on 46 types of techniques which includes total scores obtained in the matches.

Results: G1 and G2 were differentiated with one canonical function including 10 elements in model-1 and G1 (mean= .907) and G2 (mean= -.907) were 67.3% correctly classified in this model. Secondly, in the model-2 canonical function included 11 elements and G1 (mean= .767) and G2 (mean= -.767) were 61.0% correctly classified. Finally, groups were differentiated with one canonical function including 10 elements in model-3 and groups (G1 mean= .937; G2 mean= -.937) were 68.5% correctly classified. Eigen values (λ), canonical correlation (R) and chi-square test (χ^2) in the discriminant functions were shown in table-1.

Table-1: Eigen values (λ), canonical correlation (R) and chi-square test (χ^2) in the discriminant functions

	λ	R	χ^2
Model-1	.829	.673	166.058 *
Model-2	.593	.610	127.853 *
Model-3	.884	.685	173.818 *

* $p \leq 0.05$

Conclusion: It is concluded that the won and lost games in the free-style wrestling is significantly discriminated with canonical functions including at least 10 technical-tactical elements.

S025

Behavioral Sciences

LICENSED MERCHANDISE BUYING BEHAVIOR: A RESEARCH ON PERSONS SHOPPING IN FENERIUM STORE

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Licensing, a topic too frequently omitted from sport management and marketing, has become a primary responsibility of both amateur and professional sport administrators. Application of purchase the licensed sport team merchandise in sport industry is one of the most common and developing subjects. Recently, interest in licensed sport merchandise of consumers is explained with billions of dollars.

Nowadays, consumers are spending huge sum of money to have licensed sport team licensed merchandise. Licensing is an effective way to create incentives for consumers to buy a product. Soccer clubs in Turkey have also been aware of this improvement and they have formed actual and virtual licensed team merchandise stores. One of important research subjects in sport marketing academic field is that sport consumers buy licensed sport team merchandise.

Sport consumers can exhibit many of characteristics about buying licensed merchandise. To examine impulse tendencies to purchase sport team licensed merchandise, an exploratory investigation involving a sample of Fenerium Store consumers was conducted.

In the study, a questionnaire was applied in order to explain buying behavior of Fenerium Store customers. The questionnaire consisted of five parts and 23 items with a corresponding 5-likert scale (a "1" indicated strong disagreement, and "5" indicated strong agreement) to ascertain the sport consumers' level of agreement with the statements presented. Cronbach's alpha coefficient were

computed to determine the internal consistency of the sub-scales. Exploratory factor analysis was used to examine the underlying dimensions of purchase behaviors the sport team licensed merchandise. The mean scores and standard deviations were calculated with SPSS 11 on all the sub-scales of sport team identification, store atmosphere, friend group, loyalty and shopping enjoyment. Correlation analysis was used to examine relations among the five factors. To analyze hypothesis between five buying factors and demographics, T-test and One-Way ANOVA were used.

Results indicated that among five factors for impulse buying, sport team identification-support is the most important factor. Store atmosphere is the second factor for impulse buying licensed product. The last factor in impulse buying licensed merchandise is shopping enjoyment. There are significant relationships among some demographics and the factors.

S026

Health and Sports

THE EFFECT OF TWO DIFFERENT ELECTRICAL STIMULATION ON LACTIC ACID ACCUMULATION IN HEALTHY SUBJECTS

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Objective: This study was designed to determine the effect of two different electrical stimulation on lactic acid accumulation in healthy subjects.

Methods: 20 male healthy subjects participated in this study voluntarily (age: 30.00 ± 4.05) and were equally divided. Electrical stimulation was applied as Russian current to one group, while the other group received the electrical stimulation as High Voltage Galvanic Current (HVPGS). For all subjects, electrical stimulation was applied to quadriceps femoris muscle at the dominant leg. HVPGS was applied for 10min. with 5sec stimulation and 5sec rest between the frequencies of 2-100Hz, while the Russian current was applied at 2500Hz for 10sec with 50sec of rest for 10 minutes. Subjects blood lactic acid levels(LA) were determined before, in the middle and immediately after the stimulation and at 3 and 5.min of the recovery period. Subjects' physical activity level, pain threshold(VAS) and ratings of perceived exertion(RPE) were also determined.

Results: Results indicated no significant differences before, in the middle and after the electrical stimulation in LA levels between the two groups ($p > 0.05$). On the other hand, when groups are taken independently, significant difference was obtained in HVPGS group before, in the middle and after the stimulation ($p = 0.006$). In HVPGS group there was a significant difference in LA levels between before stimulation and 3.min ($p = 0.017$) and 5.min. ($p = 0.007$) of recovery period, however in Russian group no significant difference was observed ($p > 0.05$). In VAS, significant difference was obtained only in HVPGS group ($p = 0.004$). Also there was no significant difference in RPE between the two groups ($p > 0.05$).

Conclusion: It can be said that the two electrical stimulation methods were not different in lactic acid accumulation.

S027**Health and Sports****BODY KNOWLEDGE AND SOCIAL CONSIDER IN THE CONTROL OF BODY : SPORT LIVES OF WOMEN WEIGHTLIFTERS**

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Aim: It attempts to make suggestions about the quality and duration of sport lives of women weightlifters. Two questions are investigated; a) Do the athletes have enough body knowledge for controlling their own bodies? b) What is the role of social factors for athletes in controlling their own bodies.

Methods: The study was done with 11 women weight lifters who are 17-19 years old, and have been doing this sport for 1.5-6 years. Data were collected with the help of a survey consisting of 60 questions of open-ended and closed format. Data were categorized in 4 headlines: 1. The relationship between weightlifting and body, 2. The knowledge about physical capacity, 3. The knowledge about sports injury and prevention 4. The knowledge about sports injury and social factors.

Results: 1. The relationship between weightlifting and body: According to the athletes in order to be a good weightlifter, one has to have a short, strong and muscular body. After starting weightlifting athletes put on weight, got more muscular and their shoulders, hands and hips widened. They determine that these changes are because of their trainings. 2. The knowledge about physical capacity: Except for two who did not respond the question, the other weightlifters who think their muscles as strong are: waist (6), feet (5), arm (4), handwrist (4), neck (3), feetwrist (3) whereas the weak muscles are: arm (4), feetwrist (4), handwrist (2), neck (2), feet (2). 3. The knowledge about risk and prevention to injury in weightlifting: They accepted, except one, that weightlifting increases risk of injury. All of them believed that it is the most dangerous injury being waist. But few of them protected their bodies from possibilities of injury. All had been injured at least once either serious or not serious. Among these, 2 had serious defects and 4 had not serious defects. 8 athletes were careful about their injured organ after the injury in trainings. They see a doctor only when they have injuries in their organs they consider important such as waist, elbow and knee. 4. The knowledge about sports injury and social factors: Only 4 athletes had a doctor control against the risk of injuries before or after they start weightlifting. 5 of them had doctor control 1 or 2 times a year. Most of them attended their trainings while their treatment continued. Athletes think they experience the same organ injuries due to starting trainings early, heavy training and not giving enough care during training. Only 3 athletes had regular doctor control of the injured organ during and after treatment. Athletes had their injuries while they were training under the supervision of their trainer. Also, they complain about the unhealthy conditions of training grounds, poor quality of equipments, and lack of technology.

Conclusion (Discussion): Findings show that young weightlifters have a low level of knowledge and consciousness over the controls of their body, and neither the society show the necessary care over the body of weightlifters. Data implies that young female weightlifters will not be able to have long and quality sports life.

S028**Movements and Training****COMPARISON OF PHYSICAL ACTIVITY SCALES WITH PEDOMETER VALUES IN STUDENTS AT PHYSICAL EDUCATION AND SPORTS SCHOOLS**

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The purpose of this study was to determine and evaluate the relationship between physical activity questionnaire and pedometer which is considered to measure physical activity level of students at Physical Education and Sports School of Marmara University.

Twenty volunteer students (8 girls and 12 boys) participated in this study. Physical activity level of participants were calculated by using Beacke and Bouchard PAL Questionnaire Index and pedometer (only 9 students accepted using pedometer with the other tests) methods. In order to determine aerobic capacity of subjects, 1 mile run test was used. In addition, Body Mass Index (BMI) was handled as a body composition parameters.

The result of this study demonstrated that any differences were observed the result of Bouchard PAL questionnaire between girls and boys. Furthermore, there was no significant relationships among the results of PAL methods ($p < 0.05$).

Although pedometer and PAL questionnaires were used as a criterion of PAL for large population and sedenter individuals, the study showed that those methods could not be absolute criteria in order to evaluate energy expenditure for such groups like athletes and physical education students.

S029**Physical Education****THE EFFECT OF MOVEMENT EDUCATION PROGRAM IMPLEMENTED IN KINDERGARDEN ON HAND-EYE COORDINATION OF CHILDREN**

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The purpose of this study was to determine the effect of movement education program which was implemented regularly in preschool period on physical characteristics of 5-7 years of age kindergarten children. The subjects were 32 test and 32 control group consisted in preschool period. Total 64 boys and girls children were randomly selected. Movement education program was implemented on the group 1 hours a day in a week during six months.

In this study pre-test and post-test were applied on both groups. Lafayette trademark (model 32532) was used, in double hand-eye coordination mistakes number and time measured. SPSS statistical program was used for statistical analysis and Pair-Samples T test was used in the comparison of pre-test and post-test, Independent T test was used in the comparison of control and test group.

According to the results of control and test groups pre-test, there wasn't significant difference ($p > 0.05$) in; hand-eye coordination mistakes and times. At the same time the post-tests wasn't significant differences ($P > 0.05$) in; test and control groups between time values. Test-control groups was significant difference ($P < 0.01$) in; post-tests between mistake numbers. According to Test and control groups paired samples T Test results of test groups was significant difference ($P < 0.01$) in; hand-eye coordination pre-post tests between times and mistake numbers and control groups pre-post test between times. Control group was significant difference ($P < 0.05$) in; hand-eye coordination pre-post tests between mistake numbers.

S030**Sports Nutrition****THE EFFECT OF L-CARNITINE SUPPLEMENTATION DURING 10 DAYS ON 1500M RUNNING PERFORMANCE AND PLASMA LACTATE LEVEL*** Mustafa Karahan, ¹Bekir Çoksvim* Niğde University, School of Physical Education and Sports¹ Erciyes University**Comparison Before and Last Tests' Values of Placebo Group**

n=10	Before test X± SD	Last Test X± SD	p
1500m Running Time (s)	298,9±5,5	296±7,1	> 0,05
HR (beats.min-1)	139,4±3,4	141,2±4,3	> 0,05
Plasma Lactate (mMol.L-1)	16,8±1,6	16,7±1,6	> 0,05

The purpose of this investigation was to determine the effects of L-Carnitine on 1500m running performance and blood lactate level. Healthy and well-trained 20 voluntary male athletes participated in this investigation. Subjects were randomly classified in two groups as a Placebo (n=10) and L-Carnitine (n=10) groups.

This investigation was performed in two periods as first and last tests. Subjects ran 1500m at each period and performance times were recorded. Blood samples were obtained from an antecubital vein following fourth minute at the end of each period. The L-Carnitine (LC) group received 2gr L-Carnitine per day (after lunch) for 10 days and only citrus drink was given to the Placebo group (PL) at the same time.

While, there were no significant differences Placebo group's values between first and last tests, LC group's 1500m running performances increased and plasma lactate levels significantly reduced (P<0.001).

In conclusion, this investigation showed that 10 days L-Carnitine supplementation has provided an ergogenic benefit on blood lactate level and 1500m running performance on well-trained.

Comparison Before and Last Tests' Values of L-Carnitine Group

n=10	Before test X± SD	Last Test X± SD	p
1500m Running Time (s)	298,2±4,5	285,3±4,7	< 0,01
HR (beats.min-1)	138,7±4,3	139,5±3,6	> 0,05
Plasma Lactate (mMol.L-1)	18,3±1,7	16,1±1,2	< 0,01

S031**Research Methodology****THE EVALUATION OF CANDIDATE DIVERS WHO ATTENDED TO IU ISTANBUL FACULTY OF MEDICINE, UNDERWATER AND HYPERBARIC MEDICINE DEPARTMENT IN YEAR 2002-2004*** Savaş İlgezdi, ¹Şermin Şengün, ²Şahin Özen* MED-OK The Center of Hyperbaric Oxygen Treatment, İstanbul¹ IU İstanbul Faculty of Medicine, Underwater and Hyperbaric Medicine Department, İstanbul.² MU The School of Physical Education and Sports, İstanbul

In this study, 682 amateur sport SCUBA diving candidates who attended for the first time to Underwater and Hyperbaric Medicine Department of İstanbul Faculty of Medicine in year 2002,

2003 and 2004 were evaluated. Candidates were evaluated by history, physical examination, respiratory function tests, chest X ray, auditory tests, complete blood analysis, complete urine analysis for understanding their appropriateness for diving. Candidates were also examined by further diagnostic tests if any suspicious health problem were faced. The health report of allowance for SCUBA diving was not given to 17. It was diagnosed a temporary problem for one. Six were approved for diving only in decompression limits. The ratio of who were not given the health report of allowance for SCUBA diving was found 2,49 %. As a result, divers must be evaluated and diagnosed by a comprehensive initial medical examination before they are allowed to sport SCUBA diving.

S032**Movements and Training****EFFECTS OF CARBON DIOXIDE THERAPY ON PERFORMANCE PROFILES OF PENTATHLETE : A CASE STUDY*** Taner Aydın, ¹Yavuz Yıldız, ²Fatih Örs, ³Tunç Alp Kalyon* Department of Sports Medicine, Gülhane Military Medicine Academy¹ Department of Sports Medicine, Gülhane Military Medicine Academy, Ankara² Department of Radiology, Gülhane Military Medicine Academy, Ankara³ Department of Physical Therapy and Rehabilitation, Gülhane Military Medicine Academy, Ankara

Context: In light of the effects of CO₂ on the microcirculation recently described in the literature, we expected this gas, which we administered subcutaneously, to positively affect the physiological aerobic capacity.

Objective: The purpose of this study was to evaluate the effect of carbon dioxide therapy on performance of a female military pentathlon elite athlete.

Design and Measurements: We evaluated the performance profiles of pentathlete with aerobic, anaerobic, muscular, proprioceptive, biochemical laboratory, anthropometric measures, sonographic and color doppler examination in the pre-post treatment

Participants: A trained female pentathlete volunteered to participate in this experimental project.

Results: Results obtained show that there is a progressive improvement in the aerobic, anaerobic and muscular performance capacities of pentathlete

Conclusions: we believe that the absence of toxicity, the simplicity of the procedure, and the favorable results obtained in our study indicate that this is a valid method in improvement performance of athletes.

S033**Sports Nutrition****EFFECT OF VITAMIN C SUPPLEMENTATION ON SERUM IRON LEVEL AND TOTAL IRON BINDING CAPACITY OF WRESTLERS**

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Objective: Vitamin C (Vit C) supplementation can be beneficial for the athletes because of its antioxidant capacity and its positive effects on the iron absorption which is important for oxygen bounding and transport capacity. Therefore, the purpose of this study was to investigate the effects of vitamin C supplementation on serum iron (SFe) level and total iron binding capacity (TIBC) in active wrestlers.

Methods: Fourteen active wrestlers between the ages of 20-24 from Ankara region participated in this study. Subjects were divided to experimental (n=7; Xage= 20.7±1.5) and control (n=7; Xage= 20.4 ± 0.5) groups. Experimental group received vit C orally (0.5g x 2/24 hr) for a month. Throughout the study both groups consumed the same diet. Before and after the one month period of vit C supplementation fasting SFe, urine ascorbic acid (UAA) levels and TIBC were measured. The same procedure was also followed for unsupplemented group. SFe level and TIBC were measured by spectrophotometric methods. UAA level was measured by colorimetric method. Smoking and vitamin supplementation habits were also questioned. Mann-Whitney U and Wilcoxon rank test were used for statistical analysis.

Results: There were significant increases in UAA and SFe level (U=42, p<0.05) but there was not difference in total iron binding capacity (U=34, p>0.05) of experimental group. The results of this study indicated that vit C supplementation was successful on the iron absorption but it was not effective on the iron storage capacity.

Conclusion: Unchanged total iron binding capacity in vit C supplemented wrestlers may indicate that these wrestlers do not need extra vit C support. This study would be repeated by different vit C supplementation protocols.

S034**Health and Sports****DETERMINATION OF PHYSICAL FITNESS LEVEL OF HEALTHY FEMALES AGED 65-75 YEARS**

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* *Gazi University, School of Physical Education and Sports*

The purpose of this study was to determine physical fitness level of healthy females aged between 65-75 years. Subjects of the study were 494 females volunteers. They were healthy and had no limiting factors to experience the test protocol. Subjects were divided into three age groups as; 65-67 years, 68-71 years and 72-75 years. SFT (Senior Fitness Test) was applied to subjects to determine physical fitness levels. Test protocol consisted of six different tests; chair stand test, arm curl test, chair sit and reach test, 2 minute step test, 8 foot- up- and go test, back

stretch test. Heart rates of subjects were reported at rest and immediately after 2 minutes step test. Datas were analyzed by SPSS 11.0 for Windows Package Programme in One Way Anova Test, Tukey Test. The significance levels were accepted as 0,05 and 0,01.

In conclusion, the scores of physical fitness parameters decrease by aging. In general, the physical fitness levels of olders in Turkey was found less than those other countries. The reason may be that the exercise trait was specially not adopted by olders in our society.

S035**Movements and Training****CORRELATION AND COMPARISON OF MEAN RUNNING VELOCITIES AT FIXED BLOOD LACTATE LEVELS AND PERFORMANCE OF CHILDREN**

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* *School Sport Sciences and Technology, Hacettepe University, Ankara*

Objective: The aims of this study was to compare boys and girls, aged between 10 – 11 years, according to their mean running velocities at fixed blood lactate levels (FBLL), and also to investigate correlation between 800 – 1000 m mean running velocity as performance and mean velocities of FBLL.

Method: 33 selected sedentary children out of 1500 children from Beypazarı Talent Identification Project were participated to the study [Age (year) = 10.7 ± 0.59, BM (kg) = 33.27 ± 5.78, Fat (%) = 8.20 ± 6.01, Height (cm) = 142.44 ± 6.91]. Subjects' FBLL values were determined from the Modified Shuttle-Run Test (MSRT) (Hazır, 2000). MSRT was started at velocity of 8 km/h and in every 3 min velocity was increased 1 km/h until the exhaustion, with 1 min rest intervals for blood sampling from earlobe. Blood lactate (La) was measured, with electro-enzymatic method as haemolysed whole blood sample. During MSRT heart rate (HR) was measured with a telemetric system. Third degree polynomial fit was used to estimate mean running velocities of FBLLs at 2 mmol/L, 2.5 mmol/L, 3 mmol/L, 3.5 mmol/L, 4 mmol/L respectively. Furthermore, 1000m run for boys, and 800m run for girls were performed as a performance test, and their mean running velocities were calculated.

Results: Boys showed significantly lower fat % than girls (p<0.05). On the other hand, no significant differences were found between boys and girls at mean running velocities of FBLL (p>0.05). Neither girls nor boys had significant correlation with Fat % and FBLL (p>0.05). There were no significant differences found for mean velocities of 800m-1000m performance tests according to sexes (p>0.05).

Conclusion: As a result of this study, there were no significant differences found between girls and boys, aged 10-11 years, according to mean running velocities of FBLL. Furthermore, mean running velocities of FBLL could not explain the mean running velocity as performance values of 800m-1000m race for selected sedentary children.

S036 Movements and Training

METABOLIC DIFFERENCES IN RESPONSE TO VARIOUS EXERCISE INTENSITIES

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Objective: The purpose of this study was to determine the metabolic (HR, La and VO₂) differences in response to various exercise training intensities.

Methods: Subjects of this study were regularly trained 7 road and 4 mountain cyclists (Age: $X=25.18 \pm 6.17$ years, Height: $X=175.09 \pm 5.09$ cm, Body Mass = 70.43 ± 7.32 kg). Subjects were tested with cycle ergometer for VO₂max and Lactate Test (LT) against constant intensity work loads (CIE) at 2,3 and 4 mmol/L blood Lactate (La) levels. VO₂max and LT tests were performed with a progressively increasing work load protocols after subjects warmed up for 3 minutes in 60-70 W work load. Exercise test was started with a beginning workload at 90 W at 90 rpm and increased 45 W every 3 minutes. After completing VO₂max and LT tests, subjects performed 3 CIE tests representing 2,3 and 4 mmol/L blood La with random order. Tests were terminated when blood La changed ± 1 mmol/L at each exercise intensity or after 30 minutes of exercise duration. During exercise tests O₂ consumption (VO₂) and Heart Rate (HR) were measured with Portable O₂ Analyzer in each minute, and La was measured with YSI La analyzer in every 3 minutes by taking arterialized blood from earlobe.

Results: Test-retest reliability coefficient values were greater than 0.923 for all variables. 30 minutes lasting exercise time was completed without deviation in La level by all subjects in CIE2 test, 4 subjects in CIE3 test and 2 subjects in CIE4 test. Deviation time for ± 1 mmol/L criteria varied between 4.15-30 min in CIE3 and 2.44-30 min in CIE4 tests. Average La deviation times in CIE3 and CIE4 tests were found as 17.37 ± 11.01 min, 10.69 ± 10.12 min respectively. In CIE3 test there was a significant difference ($p < 0.05$) in HR between measured and estimated values. On the other hand, in CIE4 all parameters (HR, VO₂, %VO₂max) showed significant difference between measured and estimated values.

Conclusion: It was concluded that in a heterogeneous subjects prolonged exercise duration, HR, VO₂ and %VO₂max values at 3 and 4 mmol/L exercise intensities show individual differences and result in different metabolic stress, and it, therefore, is more reliable to consider individual responses instead of group averages in estimation of training work loads.

S037 Movements and Training

DIFFERENCES AT LACTATE DYNAMICS OF THE RUNNING VELOCITY AT DURING FIXED INTENSITY EXERCISE TEST

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Objective: The aim of this study is to identify the changes at lactate dynamics of the running velocity at 3 mmol/L lactate level during fixed intensity exercise test.

Method: 10 regularly trained football players from a PAF team from Turkey Super Leagues were attended the study [(Age (

year) = 18 ± 0.77) (BM (kg) = 67.25 ± 4.57) (Fat (%) = 6.02 ± 1.69) (Height (cm) = 177.9 ± 4.54)]. Subjects were participated into two tests in treadmill, one for lactate threshold test (LTT) and one for fixed intensity exercise test (FIET). LTT was applied according to incremental test protocol. LTT was started at velocity of 8 km/hr and every 3 minutes velocity was increased (8 km/h-10 km/h-12 km/h-14 km/h-15 km/h-16 km/h-17 km/h). Blood lactate (La) was measured at rest and between the increase of velocity, with electro-enzymatic method as haemolysed whole blood sample. Individual running velocity of 3 mmol/L La level was estimated from LTT with graphic method, and this was given as FIET. During FIET blood lactate was measured in every 6 minutes. FIET was ended either when blood La changed ± 1 mmol/L or after 30 min of exercise duration.

Results: Subjects' mean running velocities of 3 mmol/L La level was 15.14 ± 0.53 km/hr. During the FIET, the duration for the test was 6 min for 8 subjects (mean La = 4.18 ± 0.65 mmol/L), 18 min for 1 subject (La = 4.18 ± 0.65 mmol/L) and 24 min for 1 subject (La = 4.53 mmol/L).

Conclusion: None of subjects were able to maintain the running for 30 min without ± 1 mmol/L changes on blood lactate level. It is, therefore, concluded that their aerobic running velocity for 30 min was lower than their 3 mmol/L running velocity.

S038 Behavioral Sciences

EVALUATION OF SPORTSMEN'S VIEW AND ATTITUDE TOWARDS VIOLENCE IN SPORTS

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Objective: Violence and aggression in sport has been increasing recently. The purpose of this study was to investigate and evaluate violent behavior tendencies and reasons of athletes. Results: Regardless of gender, athletes reported violence in sport is necessary for success. Violence level was found higher in female athletes than male athletes. It was found, individuals who experienced violence in their families, have tendency to behave violent in their future lives. It was also found that media, athletes family, spectators, peers and especially coaches have an enormous influence on increasing violent behaviors in sport and this finding also supported by previous researchs.

S039 Physical Education

INVESTIGATION OF SERUM NITRIC OXIDE, LACTIC ACID AND FEMORAL BLOOD FLOW AFTER SUPRAMAXIMAL EXERCISE

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Our aim in this study was to compare nitric oxide (NO), lactic acid (LA) and blood flow dynamics after supramaximal exercise and during inactive seated recovery. Ten male athletes, mean age 22.4 ± 1.45 years, agreed to participate in the study. The subjects performed the Wingate Anaerobic Power Test. All measurements were taken at rest, immediately after exercise (T₀) and during seated recovery period at 5th (T₅) and at 20th (T₂₀) respectively. Blood samples were taken from the right antecubital region.

Femoral artery blood flow rate were measured from the right femoral artery, using Doppler Ultrasonography.

Measurements made immediately after the exercise, LA increased 600%, NO 22% and blood flow 126%, respectively all compared to rest levels ($p < 0.012$). During inactive seated recovery, NO increased progressively ($p < 0.012$), while lactic acid and blood flow showed a progressive decrease compared to rest levels ($p > 0.012$). As conclusion, the increase of nitric oxide during inactive seated recovery seems to support the views that nitric oxide contributes physiologic events more after the exercise than it does during the exercise, and the significant increase of LA during exercise seems to support the views that it contributes to vasodilatation during supramaximal exercise.

S040 Management And Organization

COMPARISON OF MEMBERS' EXPECTATIONS AND PERCEPTIONS OF SERVICE QUALITY IN HEALTH-FITNESS CLUBS WITH RESPECT TO DEMOGRAPHIC VARIABLES

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Objective: The purpose of this study was to compare members' expectations and perceptions of service quality in health-fitness clubs with respect to demographic variables.

Methods: The participants in this study were 298 female (46.9 %) and 338 male (53.1 %) members of eight health-fitness clubs. The Service Quality Assessment Scale (SQAS) was used to evaluate customer perceptions of and satisfaction with service quality in the health-fitness clubs. T-test was used to assess the mean differences between expectation and perception scores and between individual members and family members. In addition, one-way ANOVA was used to determine whether the means of dependent variables varied due to demographic differences.

Results: A mismatch was found between members' expectations and perceptions regarding quality of service offered by the health-fitness clubs. The results of a paired-samples t-test indicated a significant mean difference between perception and expectation scores (staff: $t = 12.705$, $p < 0.05$; program: $t = 14.002$, $p < 0.05$; locker room: $t = 16.669$, $p < 0.05$; facility: $t = 12.543$, $p < 0.05$; child care: $t = 9.298$, $p < 0.05$). T-test analysis was also used to compare difference scores of health-fitness club members with regard to membership type. Analyses pointed out that no significant difference was obtained in difference scores between individual members and family members for the five sub-scales ($p > 0.05$). To determine whether the means of dependent variables varied due to demographic differences, one-way ANOVA was conducted. According to ANOVA analysis there was no significant difference in difference scores between the groups in terms of staff, program, locker room or child care sub-scales ($p > 0.05$). However, on the facility sub-scale, there was a significant difference in difference scores between the group having less than 1-year membership and the group having 1-2 years membership ($F_{2,600} = 4.11$, $p > 0.05$). Analyses also indicated a significant mean difference in difference scores on the child care sub-scale between the group using the facility 3-4 times per week and the group using the facility 7 or more times per week ($F_{3,598} = 2.64$, $p < 0.05$).

Conclusion: The level of service quality presented by the health-fitness clubs in this study did not meet members' expectations in all sub-scales.

S041

Movements and Training

A STUDY ON THE RELATIONSHIP BETWEEN PHYSICAL FITNESS PARAMETERS IN 11-12 YEAR-OLD GIRLS

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Objective: A healthy society depends on the balanced development of the level of physical fitness of children who are in developmental period. In this study the relationship between the physical fitness parameters in 11-12 year-old girls were examined.

Methods: A total of 52 girls; 11 year olds ($n=31$) and 12 years olds ($n=21$), participated in this study. Physical fitness values of children were measured by tests of Sportslinx Test Battery developed from Eurofit Test Battery. In addition to this, values of BMI (Body Mass Index) were examined. Pearson Correlation test was used for statistical analysis.

Results: Positive correlation was found to be statistically significant between the values of height, and body weight and hand grip ($p < 0.01$); body weight, and BMI, hand grip, body fat ratio and flamingo-balance ($p < 0.01$); BMI, and flamingo-balance, 10x5m sprint shuttle runs ($p < 0.05$) and body fat ratio ($p < 0.01$); flamingo-balance, and plate tapping ($p < 0.01$); standing long jump, and hand grip, sit ups and speed bounce ($p < 0.01$); hand grip, and speed bounce, flexibility, body fat ratio and sit ups ($p < 0.05$); speed bounce, and sit ups ($p < 0.01$), flexibility, and body fat ratio, hand grip; 10x5m sprint shuttle runs, and body fat ratio ($p < 0.01$).

On the other hand, negative correlation was found statistically significant between the values of body weight, and speed bounce, sit ups ($p < 0.05$); BMI, and sit ups, speed bounce ($p < 0.01$); flamingo-balance, and sit ups ($p < 0.05$); plate tapping, and sit ups ($p < 0.01$); standing long jump, and 10x5m sprint shuttle runs, body fat ratio ($p < 0.01$), hand grip, and 10x5m sprint shuttle runs ($p < 0.01$); speed bounce, and 10x5m sprint shuttle runs, body fat ratio ($p < 0.01$), 10x5m sprint shuttle runs, and sit ups ($p < 0.01$); sit ups, and body fat ratio ($p < 0.01$).

Conclusion: As the values of body weight, fat ratio and BMI increase in girl of 11-12 years of age, ability of jumping, speed, explosive power, and balance and power parameters are affected negatively.

S042

Movements and Training

COMPARISON OF THE STANDARD AND THE EXTRAPOLATED DLT METHODS: BY USING TWO DIFFERENT SIZES OF CONTROL FRAME

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Among the various three-dimensional (3D) photography methods have been developed, the DLT (Direct Linear Transformation) approach proposed by Abdel-Aziz and Karara (1971) appears to

yield favorable results. The effect of calibration volume on the standard DLT method was investigated in this study. The standard DLT and the extrapolated DLT which is the extrapolation of the standard DLT beyond the limits set by the control frame, calibrations were compared.

Two different size control frame were used to calibrate the activity volume. Big control frame (BF), has 16 control points (1.2 m x 0.8 m x 0.8 m), covered %150 of the activity volume, small control frame (SF), has 12 control points (0.3 m x 0.2 m x 0.2 m), covered %37 of activity volume. Two Panasonic MS2B video cameras were used to capture the image. In order to reduce the calibration error, control points were digitised three times and the average values of control points were used in DLT parameter calculations. Control points locations were digitised 1.9 10⁻³ m (BF) and 1.6 10⁻³ m (SF). To be able to observe the error distribution inside and outside of the calibration frames, number of 175 points, which was covering the whole activity volume, were digitised. Real and calculated coordinates were compared to observe the error distribution in the activity volume. All calculations and digitising were achieved by using Matlab 5.3 Student Edition.

Standard DLT calibration was most accurate, especially as the distance between points and the center of activity volume, increased (Fig. 1). Mean absolute error of 175 points were 10.7 10⁻³ m ± 6 10⁻³ m (BF) and 17.8 10⁻³ m ± 10.1 10⁻³ m (SF). Many authors observed that standard DLT algorithms generate decreasing accuracy as one approaches the extremes of the control region and the accuracy is further limited outside of the control region. (Hatze, 1988, Wood ve Marshall, 1986).

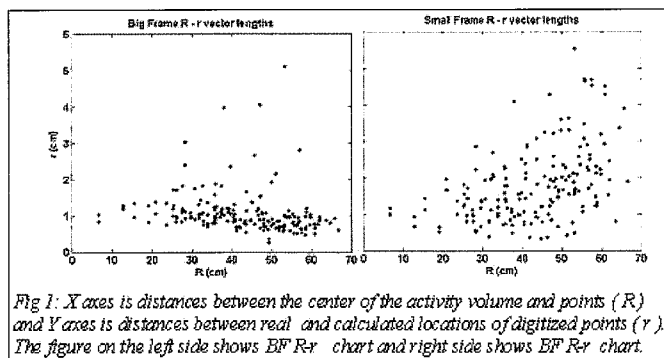


Fig 1: X axes is distances between the center of the activity volume and points (R) and Y axes is distances between real and calculated locations of digitized points (r). The figure on the left side shows BF R-r chart and right side shows SF R-r chart.

5043 Physical Education

CORPORAL PUNISHMENT IN TURKISH SPORT

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The purpose of this study was to collect data about the corporal punishment in Turkish Sports. For this purpose a questionnaire with 23 items was prepared and given to 145 athletics (18 girls and 127 boys) from football, basketball, tennis, table tennis. The results show that %22.7 of athletes subject to the corporal punishment in family. %29.9 athletes are treated with corporal punishment in the club teams. In family, the force applied 24 % by mother 13.7 % by father. In sport environment % 54.4 trainers, 6.8 % physical education teacher is applying the corporal punishment. The athletes are generally subject to the punishment between 11-15 years old. 15.9 % of athletes declare that this kind of treatments are negatively effects their performance. 15.9 % declare this kind of treatment does not affect their performance. Within the participant groups the most corporal punishment is applied in the football where 52.9 % of athletes claim that they are treated with corporal punishment.

As a result, corporal punishment is used as a tool of motivation and penalty, but this kind of practice has negative influence on all the personal development effects of the sports. To avoid this kind of practice the teacher and trainer should follow a personnel developments psychological formation programs.

5044

Physical Education

DETERMINATION OF THE RELATIONS BETWEEN PHYSICAL EDUCATION TEACHERS AND MUNICIPALITIES IN TERMS OF SPORT SERVICES

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Purpose: This study aims at determining the relations between physical education teachers and the municipalities, which are the local administration units, and developing solution advices as well for the problems detected

Method: Survey-Scanning model has been used in order to achieve the opinions of physical education teachers with local administrations. In order to gather data for the study, a survey has been prepared and applied on 452 physical education teachers who are in charge in 21 provinces. Provinces which constitute the sample has been assigned among 81 provinces after determining those which provide the easiest and sound means to reach the samples. In the study, data has been gathered by means of a survey composed of 14 questions. Data gathered has been evaluated using the statistical program SPSS for Windows 10.0 and percentage, frequency and weighed average have been used while analyzing the data.

Results: It is found that the demands of physical education teachers who have participated in the survey in terms of sports services from the municipalities was ($\bar{x}=2.76$) "middle", and the percentage of those who had no knowledge about to what extent their demands are met by the municipality was 2.5%. Physical education teachers who claimed that their demands from the municipality have been satisfied at a rate ($\bar{x}=2.37$). Physical education teachers underlined at a middle level of ($\bar{x}=2.62$) that they are "timely informed about sport activities organized by the municipalities", whereas they stated at a level of ($\bar{x}=3.93$) – high - that the municipalities should bear more responsibility in terms of delivering sports services to schools.

Conclusion: This study helped determine that there are vital communication and coordination problems between the municipalities and schools and physical education teachers. It can be said that by finding a solution to this problem, not only the municipalities will contribute to sports education, but they will have taken crucial steps in terms of delivering and making available the sports services to the community.

S045**Health and Sports****INTRAOCULAR PRESSURE CHANGES DURING SUBMAXIMAL STRENGTH TRAINING**

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The purpose of the study was to examine the effect of the sub-maximal chest press exercise on intraocular pressure (IOP) in physically active clients who has a continued membership to a sports center. The subjects had blood pressure status, drug screening, medical histories, Electrocardiography (ECG) and one repetition maximum (1 RM) test performed during previous investigations. 13 healthy males performed 3 sets of 5-6 repetitions of chest press with 85% one repetition maximum. IOP was measured using applanation tonometry with a Tono-Pen prior to exercise, within 3- 5 sec. after the third set. Data were analyzed with paired t test. A $p < 0,01$ was accepted as statistically significant. All subjects resting IOP were within normal ranges (mean: $13,84 \pm 3,44$ mmHg). Intraocular pressures were significantly ($p < 0,01$) elevated during weight lifting (mean: $18,69 \pm 5,47$ mmHg).

It was known that the enormous pressures generated by power athletes during weight lifting lead to elevations intra-cranial pressure (ICP) which obstruct venous outflow leading to hemorrhage and elevation in IOP.

This study demonstrate that IOP elevates during the 1-RM 85% resistance exercise but the elevation was not beyond the normal level. It was concluded that repetitious 85% intensity strength exercises was not causing any unhealthy effect on IOP and might be recommended for healthy adults.

S046**Physical Education****PHYSICAL ACTIVITY AND SPORTS BEHAVIOUR OF MUSLIM GIRLS AND YOUNG WOMEN IN GERMANY A COMPARATIVE ANALYSIS OF GERMAN AND MUSLIM GIRLS AND YOUNG WOMEN**

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The high number of migrants living in Germany, 7,4 million, and the relatively sparse research data on their sports behaviour have formed the basis for this study.

To investigate the sports behaviour and the kind of physical activity muslim girls practise in the German sports-system in comparison to German girls a social-empiric study, conducted among 1850 pupils in Germany in 2001, was analyzed for this comparison.

Results:

Physical activity and sports at school: Both groups of girls evaluate the physical at school in a similar way. Most of them are satisfied with this subject and only a small number of girls and young women don't like the subject ($\text{Chi}^2=6,899$, $p=0,075$). Differences between muslim and German girls concerning physical activity at school occur in the marks they get from their teachers. The marks of German girls are significantly better than the marks of muslim girls ($\text{Chi}^2=10,50$ $p=0,001$).

Physical activity and sports in leisure time: German girls are more often engaged in physical activities and sports in their leisure

time than the muslim girls ($\text{Chi}^2=10,50$; $p=0,001$) and there are differences in the activities and sports they practise. In both groups of girls swimming and cycling range on the first two positions of an activity ranking. More than 30% of the girls a young woman reported to practise swimming and nearly 30% of them do cycling, but in the next positions of the ranking differences occur. A higher number of German girls practises dancing, inline skating and horse riding, muslim girls and young women on the other side are more often engaged in sports-games (basketball, volleyball, soccer) and fighting-sports (tae-kwon-do, karate, judo).

Further differences could be found according to the participation in competitive sports ($\text{Chi}^2=9,62$; $p=0,002$) and the memberships in German sports clubs ($\text{Chi}^2=16,11$; $p=0,000$). A higher number of muslim girls and young women practise free organized physical activities and sports and they are less engaged in sports competitions.

Conclusion: These results give important basic information on the actual state of physical activity and sports practised by muslim girls and young women in Germany.

Qualitative und quantitative aspects of these activities require the development of strategies, to make it easier for muslim girls and young women to participate in sports and physical activity in the German sports system.

S047**Behavioral Sciences****MOTIVATIONAL TYPES AND COMPETENCE LEVELS OF FEMALE AND MALE ATHLETES**

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The purpose of this study was to determine the motivational types and the physical self perception levels of female and male athletes and also to investigate the relationship between these two psychological construct. The participants were 132 female and 149 male athletes aged 21.64 ± 2.41 yrs, performing in a wide variety of sports. "Sport Motivation Scale" for determining motivational types and "Physical Self Perception Profile" for determining sport competence and physical self worth level were administered to subjects. According to the Pearson Product Moment Correlation results, a significant relationship was obtained between motivational types and two subscales of physical self perception. The results of the present study indicated that there were significant differences between female and male athletes for the average scores of intrinsic motivation to experience stimulation and external regulation.

S048**Sports Nutrition****NUTRITIONAL STATUS OF TURKISH NATIONAL TEAM KARATE ATHLETES**

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The purpose of this study was to evaluate daily energy amounts, dietary intake, consumption of nutritional supplements and the knowledge about nutrition among Turkish national karate athletes, to compare the data with actual amount, and as a result guide them to have adequate and effective diet for the best athletic performance.

Ten female, twenty male karate athletes from 2004 Turkish National Team participated in this study. Two of their diet samples were taken during week days and one sample was taken at the weekend. Subject were asked to record a three day food intake. The ingredients and cooking method were also asked. Jean A.T. Pennington, Judith S. Douglas- Food Values of Portions Commonly Used, 2005, Turkish Dietitians Association Publications 1988, McArdle W.D., Katch F.I., Katch V.L., Sport and Exercise Nutrition 1999 were taken as reference in order to analyze diets. SPSS and Microsoft Excell programs were used for statistical evaluations.

The physical composition of the athletes were assessed: Females age 21.6 ± 3.5 years, height 1.64 ± 0.04 m., weight 54.5 ± 5.31 kg., BMI 20.08 ± 1.67 and males age 25.3 ± 4.5 years, height 1.77 ± 0.08 m., weight 72.75 ± 9.70 kg., BMI 23.08 ± 2.07 . As a result of their three- days- diet assessment, female athletes' daily amounts were determined as; Energy 2178 ± 725.6 kcal/ day, Carbohydrate 382.7 ± 194.5 g/ day, Protein 106.6 ± 40.6 g/ day, Fat 98.3 ± 101.5 g/ day and male athletes' daily amounts were determined as ; Energy 2419 ± 1059.7 kcal/ day, Carbohydrate 440.2 ± 234.4 g/ day, Protein 158.7 ± 93.5 g/ day, Fat 67.8 ± 36.5 g/ day. The results of their daily vitamin and mineral intakes showed that some of the athletes were consuming enough amounts of vitamin and minerals except zinc and calcium minerals. It was also found that none of the athletes were consuming nutritional elements in optimal amounts. Sixty percent of females and ninety percent of males are having meals 4 or more times a day. The results showed that females were taking their daily energy intake especially at dinner ($40\% \pm 18$), while males were consuming daily needs during three main portions ($25\% \pm 8$). Fifty percent of females and sixty percent of males reported that they have been consuming nutritional ergogenic aids.

The results of this study showed that nutritional education should be given about consuming adequate amount of food and overuse of supplements in order to reach desired athletic performance.

S049

Health and Sports

THE PREVALENCE OF FEMALE ATHELETE TRIAD

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Disordered eating, amenorrhea, and osteoporosis are collectively known as the female athlete triad. The aim of this study was to investigate the prevalence of female athlete triad among Turkish female athletes.

A total of 239 female athletes from five different city district (Edirne, Istanbul, Tekirdag, Balikesir and Eskisehir) were participated voluntarily in this study. Disordered eating behaviors were assessed with Eating Attitude Test (EAT 26). A semi structured interview form created by the investigators was used to identified body weight, types and frequency of exercises, history of fractures, menstrual history, frequency and regularity of men-

strual cycles. The participants having both amenorrhea and EAT 26 scores equal to or higher than cut off point were invited to psychiatric interview. Furthermore, dual energy x-ray absorptiometry (DEXA), were also performed to measure bone mineral density.

Of the 239 athletes, 40 (16.7 %) had disordered eating where as 19 (9.5 %) had amenorrhea. Three athletes in whole group (1.5 %) showed both amenorrhea and disordered eating behavior. Bone mineral density screening was performed only 1 of these three athletes. Finally, female athlete triad diagnosis was not made in our study group. Our study indicate that female athlete triad is not a common syndrome among young female athletes.

S050

Behavioral Sciences

RELIABILITY AND VALIDITY OF "SOCIAL PHYSIQUE ANXIETY SCALE"

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Objective: The purpose of this study was to test the reliability and validity of the "Social Physique Anxiety Scale" for 14-25 years old Turkish students.

Methods: 491 female (Mage= 17.17 ± 3.05) and 514 male (Mage= 17.33 ± 3.36) total 1005 students were voluntarily participated in this study. "Social Physique Anxiety Scale" (SPAS) is a 12-item self-report inventory developed by Hart, Leary, and Rejeski (1989) to measure the construct of social physique anxiety. Subjects were asked to indicate the degree of which statements are characteristic of them on a five point Likert type scale. SPAS and "Berscheid, Walster and Bohrnstedt Body Image Satisfaction Questionnaire" (Berscheid, Walster, & Bohrnstedt, 1973) were administered to 1005 participants. SPAS was also administered to randomly selected 71 females and 67 males from total of 1005 with two week interval for testing the test-retest reliability of SPAS.

Results: Principal Component Factor Analysis showed that two factor explains %44.86 of whole scale for 1005 students. To test the criterion related validity the Pearson Product Moment Correlation Coefficients between social physique anxiety scores and body image satisfaction scores was determined. The correlations were negative and ranged between 0.43 and 0.57. Test re-test correlation coefficient of Factor 1 & Factor 2 was 0.80 for girls and 0.76 & 0.77 for boys respectively. Test re-test correlation coefficient of full scale was 0.88 for girls and 0.77 for boys. Internal consistency in two factor construction were 0.77 (factor 1) & 0.69 (factor 2) for girls and 0.75 (factor 1) & 0.68 (factor 2) for boys. In the full-scale construction internal consistency were 0.81 for girls and 0.77 for boys.

Conclusion: According to results of this study, "Social Physique Anxiety Scale" is reliable and valid for 14-25 year-old Turkish students.

S051**Adapted PE****THE EFFECTS OF GOALBALL GAME AND MOVEMENT TRAINING ON THE ANXIETY TRAITS OF VISUALLY IMPAIRED CHILDREN**

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The purpose of this study was to determine the anxiety traits of visually impaired girls and boys (aged 10-14) who become to graded the B1, B2 and B3 in goalball and movement training 3 days a week, a day one and half hour for 12 weeks. Totally 72 students who 12 goalball, 14 movement training and 16 control group boy subjects, 10 goalball, 10 movement training and 10 control group girl subjects were assessed in this study.

State-Trait Anxiety Inventory for Children (STAIC) was translated to the Turkish by Özusta was used to evaluate of the anxiety traits of the visually retarded children.

SPSS 12.0 program was used for statistical analysis. One-way Variance Analysis (Anova) and Tukey HSD tests was used to compare to pre-test and post-test of Goalball and movement training groups. Non-parametric Wilcoxon test was used to evaluate the differences between pre-test and post-test of Goalball group, movement training group and control group.

In conclusion, it was clearly seen that Goalball game decreases anxiety levels of the visually impaired children.

S052**Physical Education****ANALYSIS OF PHYSICAL EDUCATION TEACHERS QUESTIONING SKILLS IN TEACHING**

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The purpose of this study was to examine questioning behaviors of physical education teachers in physical education classes. In particular, specific question addressed in this study was the amount and level of questioning used during physical education classes in Turkey. For this purpose, 24 physical education teachers from elementary (6-8 grade level) and secondary schools were selected. Each teacher's two class hours were videotaped. In addition, their voice was recorded using cordless microphone. All recorded data were fully transcribed, and questions asked to students by teachers during the lessons were captured from the text. Questions were classified according to the Bloom's Taxonomy of Educational Objectives. Two researchers independently coded the questions. Interobserver reliability was 84 percent. Findings indicated that 65 percent of all questions asked by the teachers were at knowledge level. Twenty-seven percent, 7 percent, and 1 percent of the questions were at comprehension, application, and analysis levels, respectively. None of the questions were either at synthesis or at evaluation level. In conclusion, there was a need to develop physical education teachers questioning skills in their teaching. Professional development programs for the physical education teachers should focus on this aspect of teaching.

S053**Physical Education****EFFECT OF PHYSICAL EDUCATION PROGRAM ON MOTOR SKILL PERFORMANCE OF SIX YEARS OLD PRESCHOOL CHILDREN**

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Objective: The purpose of this study was to investigate the effect of physical education program on motor skill performance of six years old preschool children.

Method: In the research, 54 children at Beytepe Preschool in Hacettepe University from 6 age groups, involved within the two groups, in 2002-2003 semester. The control group consists of 26 children (13 girls, 13 boys) and the experimental group consists of 28 children (12 girls, 16 boys). Groups were selected randomly during the research. The control group attended standard pre-school education program and the experimental group attended physical education program. Two group of children were tested on basic motor performance level. Motor test items designed by Morris et al. (1980) were used on the subjects.

Results: To analyze the data, independent sample test was used, for homogeneity of the groups in balance, scramble, catching, speed run, standing long jump and tennis ball throw for distance. No differences were found between the groups performances at the beginning of the program ($p>0.05$).

To analyze the data, ANCOVA was used the differences were found between the two groups performances at the end of data analyze ($p<0.05$). The gender differences were found only tennis ball throw ($p<0.05$).

Conclusion: The result indicates that the physical education program effect on motor skill performance but, no effect on groups by gender of 6 years old children.

S054**Movements and Training****RELIABILITY OF 5M MULTIPLE SHUTTLE RUN TEST AND ITS RELATION TO REPEATED WINGATE TEST**

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Objective: The purpose of this study was to determine the reliability of 5m Multiple Shuttle Run Test (5m MSRT) and its relation to repeated Wingate Test.

Methods: 30 male physical education students participated in this study as volunteers. 5m MSRT was repeated twice with 3 to 7 days apart in order to determine the reliability of the test. One week later, three consecutive all-out 30-s Wingate test separated by one minute of recovery was performed by the subjects to determine the relationships among the performance indices of the two tests. Maximal and recovery heart rates were recorded as indicators of physiological stress and recovery level during the tests.

Results: Intra-class Correlation Coefficients (R) for peak distance, total distance, delta distance and fatigue index were found as 0.54, 0.86, 0.28 and 0.40, respectively. According to the results of Pearson Correlation Coefficient Analysis total distance was significantly correlated with PPW3 ($r=0.40$, $p<0.05$), MPW2

($r=0.42$, $p<0.05$), MPW3 ($r=0.50$, $p<0.01$), FIW1 ($r=0.40$, $p<0.01$), FIW2 ($r=0.58$, $p<0.01$), FIW3 ($r=-0.48$, $p<0.05$) and FIRW ($r=-0.50$, $p<0.01$). Peak distance was significantly correlated with only MPW3 ($r=0.45$, $p<0.05$). There was no significant correlation among other measures of 5m MSRT and repeated Wingate test.

Conclusion: Among the performance indices of 5m MSRT, total distance has high reliability and was significantly correlated with most of the performance indices of repeated Wingate test. Therefore, it can be used with confidence as an indicator of anaerobic endurance. On the other hand, peak distance has low reliability, therefore, should be used with caution.

S055

Behavioral Sciences

THE APPROACHES OF PROFESSIONAL AND AMATEUR FOOTBALLERS ON THE UNFAIR BEHAVIORS DURING THE MATCH

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The purpose of this study is to assess the approaches of the approaches of professional and amateur footballers on the unfair behaviors during the match. Total of 222 footballers have been surveyed to collect the data for this study. The sample group consist of 100 professional and 122 amateur footballers from 4 professional and 6 amateur football organizations. The questionnaire includes a set of statements to determine their tendencies towards "fair play".

The analysis of the questionnaire illustrates that professional players behaves harsher than amateur players under critical situations. Also, even if they are amateur players, the more successful players have the tendency to behave harsher under such situations. When the benefit of the team is a great priority, the importance of fair play loses its value among professional players. The professional players and amateur players have similar opinions about cheating during a game. They both approve cheating under critical situations. The professional players have much less tendency in obeying the fair play rules. Accepting unfair behaviors during the matches, amateur players shows similar ratios like professionals and it can be evaluated that idea of winning as positive values pass forward of fair play approach of amateur players.

S056

Health and Sports

ENDOTHELIAL FUNCTION AND EXERCISE CAPACITY IN ATHLETES

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Objective: Brachial artery ultrasound during reactive hyperaemia is a non-invasive method of assessing peripheral endothelium-dependent vasodilatation. Aerobic exercise has the potential to improve local endothelial function. We sought to analyze the effects of regular aerobic training on brachial artery endothelial function in endurance athletes.

Methods: We studied diameter and blood flow of the brachial artery in sixty-nine athletes and 35 healthy male subjects. All participants underwent a standard Bruce multistage maximal treadmill protocol with metabolic measurements. In the same subjects flow-mediated dilatation of the brachial artery was recorded by inducing an ischemia through a forearm-occluding cuff.

Results: Maximal oxygen consumption was significantly higher in the athletes group than in the controls (59.1 ± 4.3 vs. 41.7 ± 3.4 ml/kg/min, $p<0.001$). Flow-mediated dilatation of the brachial artery induced by forearm occlusion was increased in athletes (14.7 ± 2.1 vs. 8.3 ± 1.7 , $p<0.01$). Baseline measurements of the diameter and the blood flow volume of the brachial artery were similar in both groups. During reactive hyperaemia period, the percent of the changes of endothelial diameters and flow were characterized by significantly higher in athletes than in controls

Conclusion: Higher flow-mediated dilatation levels in athletes are reflecting better vascular adaptation to habitual aerobic exercise.

S057

Movements and Training

THE EFFECTS OF THE 2 MONTHS SWIMMING TRAINING ON THE BLOOD LACTIC ACID OF CHILDREN SWIMMERS

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The aim of this study is to evaluate the effects of the 2 months swimming training on the aerobic and anaerobic capacities by a blood lactic acid (LA).

17 short distance male swimmers ($15,176 \pm 0,809$ year) were tested in the study. The first measurement was done 1,5 month after from the swimming season began, the second measurement was done 2 months after from the first measurement. 8x100m swimming protocol was used in the measurements and five incremental swimming workloads corresponding to %75, %85, %90, %95 and %100 of best time for 100m freestyle were completed. After each swimming, blood sample was taken and LA was determined. The earlobe was pierced by an apparatus marked Softclix that have a needle. The blood was taken into the 25 microliter capillary tube, and blood was given to the YSI Model 1500 Sport Lactate Analyser by the injector of the capillary tube. After 2 minutes, amount of the blood lactate was determined. The heart rate (HR) was measured from the carotis artery after each swimming in 15 seconds. The swimming time was recorded and the swimming speed was calculated.

When the before and after training LA and speed were compared, at the lowest swimming workload (%75), LA wasn't found different ($p>0,05$) but the speed was significantly increased after training ($p<0,01$). This situation shows that the aerobic capacity developed. At the other swimming workloads both LA and speed increased significantly after training ($p<0,05$ and $p<0,01$). Before training anaerobic threshold level has been seen at the %85 swimming workload but after training at the same swimming workload more LA was produced. This situation shows that at high swimming speeds aerobic capacity decreases but anaerobic capacity improves significantly. HR values were found significantly higher after training than before training ($p<0,01$).

S058

Movements and Training

THE COMPARISON OF SWIMMING TRAINING AND PHYSICAL EDUCATION TRAINING IN DEVELOPMENT OF THE CHILDREN WITH DOWN SYNDROME

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The positive effects of the sports for healthy people include disabled people of the society. By using sports education disabled person is being able to find an identity in the society, improve his/ her life quality and have better social relations. In this respect, the children with Down Syndrome who are in the mental deficiency class, sports education can be used as an instrument to rehabilitate them. Therefore, the main purpose of this research was to improve physical abilities of children with Down Syndrome that using sports education. So that, the effects of motor development on physical appropriateness and the comparison of swimming training and physical education training were researched. The subject of this research was the children with Down Syndrome who were between 9-15 years old and educatable and were being classes of educated in the special the primary school.

The average age of the children in both groups was 12,65±2,13, average height was 141,13±9,93 cm and the average weight was 47,15±14,76 kg and their body mass index was 34,75±7,50 and their IQ level was 56,95±7,20. 10 of the children with Down Syndrome were taken swimming training and 10 of them were taken physical education training. Trainings were applied for three months along, three days a week and 1 hour in a day.

The Brockport Test which was formed mental disabilities was used in the beginning and at the end of the applications.

According to Brockport Test; the measurement of the height, weight, skinfold and body mass index for the identify of the body composition; 16 m pacer for the measurement of the target aerobic movement test; musculoskeletal functioning bench press, dominant grip strength, extended-arm hang, flexed arm-hang, isometric push-up and modified curl-up is being used for musculoskeletal strength and endurance; trunk lift, back-saver sit, reach and modified apply test is being used for flexibility,

According to the results of data, there was a significant development was seen on the physical performance of the children who were trained to swimming and physical education performances.

As a conclusion, there was significant development of physical capacities of the children who were trained swimming compared with the children who were trained physical education activities.

S059

Movements and Training

METABOLIC AND MAXIMAL EXERCISE TEST RESULTS OF TURKISH PROFESSIONAL SOCCER PLAYERS -A COMPARISON OF THE SEASONS 1990-1991 AND 2002-2003

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Objective: In the present study, we have purposed to determine changes in professional sportmen's physiological parameters. We have compared metabolic and maximal exercise test results of professional soccer players in the seasons 1990-1991 and 2002-2003.

Methods: All files of athletes who had applied to Department of Sports Medicine for test in the seasons 1990-1991 and 2002-2003 were screened, and in total 140 files of professional male soccer players were investigated. Resting ECGs, respiratory function tests, maximal exercise test results and metabolic test results were obtained from the files. In both seasons, the Bruce Protocol was used for maximal exercise tests which were conducted on a Quinton-5000. The Breath-by-breath method and a Sensor Medics 2900-C Measurer were used for the metabolic tests. Statistical analysis of the results was evaluated with the Student-t Test.

Table 1. Antropometric Measurements of Soccer Players in the 1990-91 (1st group) and 2002-03 (2nd group) Seasons

	AGE(year) mean ±SD	HEIGHT (cm) mean ±SD	BODY MASS (Kg) mean ±SD
1st Group (n:65)	25,85±4,02	177,56±4,89	73,49±5,72
2nd Group (n:75)	25,11±5,15	181,25±5,42	77,32±6,82
P value	P>0.05	P<0.01	P<0.01

Results: Comparison of the 1st group with the 2nd group showed an increase in heights and weights of the athletes. The decrease in resting heart rate and the increase in the inspiration capacity was significant (p<0.05). The increase in the heart rate at recovery 3rd minute, the increase in percentage of maximal heart rate, the increase of oxygen uptake at the anaerobic threshold level and the increase in the MVV values were found to be very significant (p<0.01). Increases in the endurance time, in the maximal heart rate, in the maximal oxygen uptake and in the heart rate at the anaerobic threshold level were very significant (p<0.001).

Table 2. Test Results of Soccer Players in the 1990-91 (1st group) and 2002-03 (2nd group) Seasons

	1st GROUP (n:65) mean±SD	2nd GROUP (n:75) mean±SD	P Value
VO2Max (ml/kg/min.)	49,43±7,39	62,67±6,55	P<0.001
Resting Heart Rate (beat/min.)	66,94±13,24	62,23±8,83	P<0.05
Heart Rate at Anaerobic Threshold (beat/min.)	143,90±10,10	155,55±8,27	P<0.001
VO2 value at Anaerobic Threshold (ml/kg/min.)	32,01±6,45	38,95 ± 7,98	P<0.01
Endurance Time (min.)	14,34±1,94	16,76±2,03	P<0.001

Conclusion: Regular and more intensive training has increased the VO2Max values and endurance time, which are indicators of good condition. Since there is no possibility of genetic changes during the last 15 years in the Turkish soccer players, this improvement must be because of the fact that physical condition,

besides technical capacity, has gained importance. At the same time, better possibilities of football clubs, better nutrition, better camping and training conditions have improved the fitness of professional Turkish soccer players and opened the way to success in the past years. In addition, soccer player selection criteria may have played a role in the improvement of the performance. Furthermore, regular performance tests and individual training play an important role in the improvement. The duration, frequency and intensity of trainings have increased in accordance with better possibilities provided by the clubs to the players.

S060

Health and Sports

THE EFFECTS OF EVENT RELATED DIFFERENCES AND AGE ON ANAEROBIC POWER AND CAPACITY IN TRAINED CHILDREN

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Objective: The purpose of this study was to determine anaerobic power and capacity values of young male and female track and field athletes and compare them according to age and event related differences.

Method: Sixty-three boys aged between 11-16 year and fifty-six girls aged between 12-14 year totally 119 track and field athletes were participated to this study as a subject. Athletes were separated into 3 age groups and 2 event-related groups for each gender. Age groups were composed of 11-12; 13-14; 15-16 years old males and 12; 13; 14 years old females. Event-related groups included middle-long distance runners (group1) and throwers, jumpers, sprinters (group 2). Height, body weight body fat % and fat free mass were determined by using anthropometrical methods. Anaerobic power, anaerobic capacity were also determined with Wingate test performed against a resistance of 70 g per kg body mass for boys and 67 g per kg body mass for girls. Two-way ANOVA (2x3) was used for statistical analysis.

Results: As a result, although the effects of age on absolute anaerobic power and capacity were significant for boys ($p < 0.01$) but not girls ($p > 0.05$), the effects of age on relative anaerobic power and capacity were not significant in both gender ($p > 0.05$). Besides these, absolute anaerobic power and capacity relative anaerobic power values of group 2 were significantly higher than group 1 ($p < 0.05$).

Conclusion: In conclusion, these results indicate that both age and event related differences influence anaerobic responses in young male and female track and field athletes.

S061

Technology

KINEMATIC ANALYSIS OF OVERARM THROWS IN HANDBALL PLAYERS OF DIFFERENT LEVELS

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The purpose of this study is to analyze the kinematic differences or qualities related to elbow angles, shoulder angles and ball velocity in the overarm throws performed by handball players at different levels.

In this study, a two dimensional (2D) kinematic analysis of a total of 24 athletes from one team in the Turkish Men Super League (N: 12 average age: 20.25 ± 5.22 years) and one team in the 1st League (N: 12 average age: 19.75 ± 3.54 years) was carried. Athletes performed the throws in three different ways; standing, with one step and with three steps. In order to obtain the data related to the kinematic analysis SIMI[®]motion Software was used. For the statistical analysis of the data, Mann-Whitney U test was used ($p < 0.05$).

According to the results of the study, in both teams, the highest values in terms of velocity values at ball release were obtained in the three steps throw (Super League Team: 20.80 ± 1.02 m/s, 1st League Team: 19.35 ± 1.47 m/s). Further, it was also observed that the values of elbow and shoulder angles of athletes are not much different both when the arm is at the rear and at the moment of throw. However, ball release velocity indicate some differences. The result showed that there was a significant differences between Super League team and 1st League team results in term of ball release velocity in both one step throw and three step throws.

According to the results of the study, there were significant differences in three out of 12 elements of technical combination of overarm throws. In addition, significant differences were also observed in the values of velocity at ball release.

S062

Health and Sports

SWIMMING FOR ALL

* Hashem Koozechian
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Health and fitness have a major role in improving the quality of life, society and the productivity of the nation as a whole.

The advent of technology, reduce work hours in the most countries in the world and it has been caused a rapid change in the spending of free time of large group of the population.

Sport and physical activities have become very popular. One of the important task of governments is to build more sport facilities in order to participation and provision for everyone in all ages.

Researchers have found swimming is one of the most popular sport activity for all ages particularly in Iran (Ehsani, 2002). Recreational sport managers should notice provision of swimming pools can be a first priority for them.

S063

Physical Education

THE CONTEMPORARY ERA, CHARACTER AND NATURE OF SPORT

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1. Objective of the paper is to show that the contemporary scientific, technical context and general democratically rounding, from one side, and, from the other, political and economical power, fundamentally determinate the model of the sport as a phenomena in the society, and social dimensions and functions of the physical activity.

2. Social character and human nature of sport and physical activity is analyzing by the interdisciplinary, philosophical and sociological, theoretical method.

3. Modern sport is modeled to the requirements of contemporary era - life standards in technical age, to recognize productive and artistic dimensions and to neutralize political and economical influences.

4. The aspects of the sport and physical activity, so we have to promote through HPERSD, are:

- Cultural and scientific, as well as, physical and conditional (technical) standards in defining the model of sport, physical education and training;
- Opportunity for equal social (sexual, aged, educational, professional, ethnical, regional) chances in space of the both, nonprofessional and professional sport;
- Autonomic action of the athletes and collective action of the groups;
- Sport's qualities of the medium performances.

S064

Physical Education

MOTIVATION & MOVEMENT THROUGH THE USE OF PEDOMETERS

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¹ Valdosta State University

Objectives: To demonstrate the use of pedometers as a motivational tool to encourage movement amongst youth and adults.

Methods: 1) Using a Powerpoint presentation to reveal the latest International study on youth activity behavior on three continents 2) Establishing the need for pedometers to motivate participation 3) Allow hands-on experience with pedometers to demonstrate set-up and applications 4) Use pedometers to demonstrate the development of lesson plans

Results: At the end of the session:

- Participants will have a clear understanding of the use of pedometers.
- Participants will be able to demonstrate the use of pedometers in a classroom
- Participants will be able to develop lesson plans to use a pedometer as a motivational tool to encourage participation in physical education and wellness environments

Conclusion: Research shows that pedometers are perceived to be 'cool' among 8 - 12 year olds. Indications are that a pedometer taken home from school impacts the family as a whole. Pedometers meet most technology standards in Education. It is an accurate measuring tool for intensity (steps) and duration (time in exercise). It is also the least expensive form of technology, per student, for Physical Education.

The hard work has been done over the past four years in the USA. Lesson plans are developed, curriculum materials are available, and pedometers have been evaluated for accuracy and durability. Join us to learn more on the subject.

S065

Physical Education

MOTIVATING ASPECTS OF THE PUPILS IN THE PHYSICAL EDUCATION

* Agron Cuka, Ylli Zhurd

This study has as its aim to present some motivating aspects of the pupils' participants in the motor-sports activities on which

the teacher of the physical education should be based upon for the improvement of the quality of the lesson.

For carrying out this study, we have used the methods of the observation, conversation and of the questionnaire. The subjects of the study are the pupils of the different high schools of the capital of Albania (Tirana). There are 21 high schools in the city, with 18900 pupils and over 12% of them from the first to the fourth year of the school (ages of 15-19 years old) were questioned. The selection of the school-grades has been made at random. Here we have included pupils of different social strata and levels. This material has undergone a statistical elaboration. There are a lot of pupils expressing themselves that the indexes of physical (bodily) development, as well as their sports level and skills have a great impact on the self-evaluation and evaluation of the others, and on the popularity they are enjoying at school among the schoolmates. As a result of this study we saw that 43.8% of the pupils (of whom 44.6% of the girls) are of the opinion that the indexes of the physical bodily development are of a great psychological burden concerning the evaluation each individual makes to himself/herself or to another person. Seeing this from the judgment of the opinion existing among the young pupils in the schools, 69.4% of them express themselves that the persons with popularity among the coetans are mainly those who have a good physical bodily development, as well as a high level of the sports skills, and they are mainly athletes. This is a standing opinion for four years at school, only by a small fall of 1% in the fourth year.

A good pupil who is based upon these aspects, not only will accomplish all the educational valence of this education, of the education of all the personality, as well as he will best accomplish even the needs of the future.

S066

Physical Education

GRADING IN PHYSICAL EDUCATION: 7TH AND 8TH GRADE STUDENTS' POINTS OF VIEW

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Physical education programs are generally responsive to the needs of society. A sound physical education offers a systematic and progressive program for all children, and that program should be worthwhile for the whole lives of students. One way to make sure that the program works effectively is by the use of assessment, evaluation and grading (Cankar, Tusak, 2002). Due to the fact that effective teaching is related to student learning, assessment and grading of student progress is a crucial component in the process (Kirchner, Fishburne, 1998). A major purpose of the study was to explore how 7th and 8th grade students experience and view the grading process in physical education.

The research was carried out on 13-14 year-old students (N=1.649). We used purposeful sampling from five college cities in Hungary. All students were asked to fill out a questionnaire anonymously. Due to the levels of data, nonparametric statistics were used.

We were happy to hear that 62.6% of students believe that information from physical education will be useful and beneficial for future. This result was significant at the .0001 level. According to students' beliefs the purpose of physical education is to have an opportunity for being physically active (33.8%), to work on strength, stamina, speed, and flexibility as parts of conditioning (33.7%), and to pursue a healthy active lifestyle (21.1%). Contrary to our expectations, students think that grading in PE is mostly based upon their own individual progression (40.1%), the obtained Chi-square was significant at the .0001 level. The majority of students agree with their own PE grades (63.1%) and a low percentage of 12.7 clearly disagrees with it. The statistics also showed a significant difference at the .0001 level. To fully understand this result it is important to know that 49.5% of students have 5 and 39.7% have 4 as their PE grades. That is probably why it is no surprise why the majority of students (90.2%) agree with their grades ($p < .0001$).

In our presentation, we'll give theoretical and practical considerations and conclusions for primary PE teachers and college instructors for improvement.

S067

Physical Education

THE INFLUENCE OF DIFFERENT TEACHING STYLES ON PUPILS' GOAL ORIENTATIONS IN PHYSICAL EDUCATION

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Introduction: Although a strong case has been presented implying that different teaching will impact about pupils' motivational orientations, there have almost been no studies that have set out to investigate this important relationship. Given that school PE is the only place where all young people regularly meet physical activity experiences, and given the widespread acceptance of teaching styles, it is of some importance that the impact of different teaching styles on the motivational orientations of lessons and, subsequently, young people's motivational orientations, is explored in more detail.

Objective: The main purpose of this study was to investigate the influences of four different teaching styles-groups on pupils' perceptions about their motivational orientations.

Methods and Results: By means of a Greek sample of 75 6th grade pupils, the influences of teaching styles on pupils' goal orientations were investigated. LAPOPECQ was distributed twice, before and after the application of the Experimental Education Program consisting of four (A-D) teaching style-groups. Employing a paired samples t test, the results indicated significant pre-to-post changes; thereafter, a two-way independent analysis of variance and post-hoc Bonferroni techniques resulted significant differences in the pre-to-post changes of pupils' goal orientations. The effect of gender differed only for the assimilation (B) and mainly for the production (D) teaching style-groups, examined with the use of independent t tests. Pearson product-moment correlations were applied to determine the degree of relationships in the changes of LAPOPECQ components for each teaching style-group and for the whole sample. The results indicated that

teaching style-group A denoting reproduction of knowledge affected negatively pupils' perceived motivational orientations towards learning/task, while, teaching style-groups B, C and D implying assimilation, discovery and production of knowledge respectively revealed a positive effect.

Conclusion: These results indicate an increased need for indirect approaches in instruction [1]. Teaching styles do play a role in the achievement goal orientations.

S068

Behavioral Sciences

THE EFFECT OF SOCIAL STRESS ON PERFORMANCE LEVEL OF ATHLETES IN EGYPTIAN NATIONAL TEAM OF GYMNASTIC

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* Moustafa Hussein Bahy

* *Minia University*

Stress occur generally as a result of an individual or a group of individuals concentration on factors beyond control, which make the individual unable to cope psychologically with society around him.

The concept of stress indicates that it is an intrinsic or external change leading to a sharp constant emotional response. This research aims at recognizing the effect of social stress on

performance level of international gymnastic athletes and studying the difference between the results of apparatus and the relation between social stress and performance level on various apparatus. The researchers used the descriptive method [field survey]. the community of the research consists of members of egyptian national team of gymnastic on May 2004 championship. They were [11] athletes.

THE researchers used test of social stress.

Research results were as follows:

1. social stress have an effect on the performance level of athletes at egyptian national team of gymnastic.
2. there are difference between social stress and performance level on various apparatus.

S069

Management And Organization

QUANTITATIVE ASPECTS OF HUMAN RESOURCES IN SPORTS MANAGEMENT

* Habib Honari , *Mahmoud Goudarzi

* *Allame Tabatabaei University, Tehran University*

Sports have become an economic sector of vital importance, but we shall not concentrate exclusively on this subject, but take a close look at human resources management in general and its contribution to the value of sport.

The modern management of a sports entity requires not only the normal skills needed of a professional in order to manage a company. Social skills are also necessary as managers have to work with specific groups of persons and within widely-differing kinds of legal and business structures, ranging from public to private companies and including social economics.

A discussion on the different techniques, whether these are required either by law or on a voluntary basis, as well as the quan-

titative aspects, or those capable of being measured in sports companies or entities. It should be understood from the outset that data gathering and its subsequent control by voluntary.

Establishing a system of management accountancy and its control which considers human resources as a strategic variable of the entity, is the first step towards establishing an information gathering system which is later incorporated into the remaining work areas of the strategic plan of the entity and/or company. With reference to the work of Sapco, let us examine the critical areas of an information system based on the accountancy of human resources management:

Accounting data on human capital is becoming increasingly relevant in companies, together with the new e-economy and technological revolution. It is considered that an adequate management of talent and know-how, in short, of its human capital, may cause a company and/or entity to increase its net worth 20 – 30%. In the conclusions to this talk, we make reference to the current status of this subject and the prospects for the future. With the application of new technologies, companies have become very sensitive to the demands for information, to which the traditional financial do not provide a satisfactory response, especially if we add the existing administrative inflexibility

The sports sector can and must face these new challenges, firstly, because its position is closer and closer to the leading economic sectors, secondly, due to the idiosyncrasy of these activities in which social projection is not only relevant but part of the assets of trading companies, clubs, sports councils and/or governing institutions.

S070

Physical Education

HOW HUNGARIAN PRIMARY SCHOOL STUDENTS ACQUIRE THE GOALS OF PHYSICAL EDUCATION

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Objective: According to WLRA International Charter for Leisure Education (1) the overall goal of leisure education is to help pupils and students achieve a desirable quality of life through leisure. Within the formal Educational Frameworks WLRA proposes to locate the potential leisure content that exists in every subject. Hungarian National Core Curriculum (2) justifies 5 general developmental objectives in which it states that it denotes the maintenance of the need for physical activity for a healthy life-style. Green (3) pointed out that there needs to be a shift in emphasis in Government policy and PE practice in several respects: first and foremost: away from concentration on competitive, performance-oriented sport in PE and towards the inclusion of more recreational sporting activities. The purpose of this investigation was to examine how far the objectives of the Core Curriculum are realised in practice. How far students do acquire these values? What are their conceptualisations on goals of Physical Education and whether it depends on their out of school sporting habits.

Methods: 3.386 5-8 grade students from five college cities in Hungary chosen by purposeful sampling completed the questionnaires. Validity and reliability were tested. Data was analysed by descriptive statistics and nonparametric tests.

Results: Results indicated that students perceive Physical Education as a subject important mainly to improve physical fitness and 'to move' but only 9 percent pointed out that its main goal is health and healthy lifestyle. It seems that students do not directly connect physical activity with a healthy life-style. Albeit to a lesser extent balance between mental and physical work was mentioned. Leisure did absolutely not come up. Contrary to expectations there was no significant difference between physically active students, doing workout apart from school and students who only do sports at PE lessons. Only one percent mentioned that its goal is to prepare for professional sport, however many PE teachers and coaches look at PE lessons as the place to select talents. Surprisingly, we found significant difference between active and less active students in the question what would they like to do on PE lessons. Athletes more often stressed play and recreational activities. Descriptive statistics revealed that physically active students believe that their peers are also active despite the ones who themselves are not active; they believe that their peers are also 'lazy'.

Conclusion: The overall findings of this study present empirical evidence to reconsider methods in PE in order to make students realise the objectives laid down in the Hungarian National Core Curriculum. There is a need to work on models to promote physical activity as a tool to reach healthy lifestyle not only physically, for better physical fitness but as well mentally, as a way of leisure. More detailed research should be completed in order to analyse deeper correlations on teachers' methods and student values.

S071

Health and Sports

THE ROLE OF SOCIAL PRIORITIES IN THE DIRECTION OF SPORT STRATEGIES

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Introduction: The modern world has experienced wonderful changes during last decades. In such a changing environment, we can expect the social needs to be progressed. Among these needs, sport and physical activities are subject to dramatic changes. According to scientific findings, the majority of society is interested in free and informal physical activities than competitive and formal sports. Democracy is entering to the field of sport. The 21st century is not the age of common sports like football, volleyball, etc. Instead it is the time of recreational activities. In some developed countries and even some developing countries efforts have been done to include social priorities in strategic programs for sport. The main goal of this study, is determining social priorities in sport. In addition, we will analyze the importance of social priorities and needs, in future strategies for sport.

Methods: The questionnaires of survey (Cronbach's alpha 89%) were sent to academics and faculty members of physical education of universities of Iran. Almost 80% of population replied to questionnaires. We received 169 completed questionnaires from 33 universities. 76% of subjects were male and 24% were female. Statistical analysis included descriptive, factor analysis, and MANOVA.

Results: The main finding of this study was the growing importance of sport for all in the society. The above-mentioned development must include facilities and more investment on community sport. Our responders believed that because of easier access to sport for all and in accordance with global trends, more attention must be paid to sport for all. Elite sport is not the main priority of modern life.

Discussion: Although the governments are interested in elite sport social trends is towards sport for all. We found that sport for all is the main choice of people. This finding is consent with other studies. Physical activity in 21st century has two aspects: Recreational, and healthy. In present study the necessity of cognition of social needs, has emphasized. In some countries like England South Africa and some European countries efforts is in process of execution to determine social trends toward sport. What is clear is that, within the progression of postmodernism, the values of society are dramatically changing. Like other phenomena of modern living, the interests of people to physical activity are changed. Instead of engaging themselves in competitive sports, people prefer to participate in recreational (2) and informal activities. In accordance with modernized priorities of 21st century, in addition to elite sport, the program designers must focus on sport for all. Meanwhile development of sport for all, in turn, will cause to development in elite sport.

S072

Technology

EXPERIMENTAL ANALYSIS OF CRAWL STROKE SWIMMING

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In this work, the crawl stroke swimming is investigated experimentally. Two different sets of experiments are performed in order to determine (a) the propulsive force developed by the swimmer and (b) the relations between stroke rate, velocity and arm position of the swimmer. In the first part of the experiments, the swimmer is tethered to the edge of the pool and the force in the tether line is measured by a spring, a scale and a video camera system. The tether force patterns are obtained and the relation between the tether force and the stroke rate of the swimmer is determined. In the second part of the experiments, the swimmer is asked to swim freely at different stroke rates and with different arm position angles. The swimming motion, which is recorded by the video camera, is analyzed and the relation between the swimmer's velocity and the stroke rate is investigated for different arm position angles.

S073

Movements and Training

A COMPARISON OF THE ANTHROPOMETRIC AND PHYSIOLOGIC CHARACTERISTICS OF TURKISH ELIT AND NON ELIT SPORT CLIMBERS

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The aim of this study was to compare anthropometric and physiologic characteristics in Turkish elit and non elit sport climbers. Elit sport climbers group compared 13 sport climbers aged 27±4.4 years and non elit sport climbers group consisted of 13 sport climbers aged 25±4.9 years.

The test battery included test of age, years of climbing, experience, height, body mass, % body fat, fat-free mass, body fat mass, right and left grip strenght, right and left pincer strenght and some pulmonary values (VC, FEV1, PEF, FVC, FER, F50, F25, MEF, MVV).

The test which resulted in significant differences ($p < 0.05$) between elit and non elit sport climbers included the left grip strength (elit; 43.3 kg., non elit; 39.0 kg.), % body fat (elit; 13.3%, non elit; 16.9%) and from pulmonary values PEF (elit; 572.6 lt/s, non elit; 505.1lt/s), F50 (elit; 5.7 lt/s, non elit; 4.9 lt/s) and MEF (elit; 9.3 lt/s, non elit; 4.6 lt/s); for three tests, the elit climbers performed significantly beter than the non elit sport climbers.

These results demonstrete that elit sport climbers have greater shoulder girdle grip strenght and some pulmonory values and low % body fat than non elit sport climbers.

S074

Behavioral Sciences

TURKISH ADAPTATION OF A CHILDREN'S FORM OF THE SPORT COMPETITION ANXIETY TEST: SCAT-C

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Objective: The purpose of the study was to test the reliability and validity of "A Children's Form of the Sport Competition Anxiety Test" (SCAT-C) for 10-14 aged Turkish children.

Methods and Results: For this reason, four studies were doing. The purpose of the first study was to translate inventory of Turkish version. The second study was to examine test-retest reliability. A total of 20 (age mean=11.43+1.32) female rhythmic gymnastics players in ODTÜ team members participated in to this study. Inventory was applied test-retest reliability for 3 weeks intervals was .89. The purpose of the third study was to make what kind of changes a National Female Rhythmic Gymnastics Team players experience one week before, 2 hours before and after the competition in competitive anxiety. 9 athletes having age average of 12.33+1.00 participate in this study. As the competition time come closer, athletes' competition anxiety scores were increased. As for after the competition, competition anxiety scores was decreased. Results show that, competition anxiety measured with SCAT-C and anxiety components changes after and before the competition. A total of 300 child athletes, 175 males and 125 females participated to the fourth study (age mean=12.89±1.88).

Conclusion: The Cronbach Alpha internal consistency for total inventory was .76. As a result, the obtained results on reliability and validity of SCAT-C show that SCAT-C is usable test for 10-14 years female and male Turkish children's.

S075**Movements and Training****COMPETITION ANALYSIS OF 35. WORLD FREE-STYLE WRESTLING CHAMPIONSHIP**

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The aim of this study was to analyze the competitions in 35. World Free-Style Championship, and to examine the technique values of the National Turkish and USA Team. The Free-Style Wrestling Championship was in Sofia at 21-25 December 2001. 311 free-style competitions were recorded and the analysis were done by these recordings. The way of winnings, the finishing times, the technique numbers, the points and the passivity numbers of the whole and the classifying competitions; the techniques that the Turkish and USA Team exposed to and applied were determined and signed on the competition analysis forms. For statistical analysis, ratio for one competition (ROC) for each parameter was calculated.

In this championship, most of the free-style competitions finished in official time and by points in all weight categories. Same status is validity for the Turkish team, USA team and the classifying competitions. In the whole competitions, total 1590 techniques (were applied and 2376 points were taken; 296 passivity and 32 tying salto were performed. The Turkish Free-Style Wrestling Team applied 70 techniques took 114 points and exposed to 53 techniques gave 73 points . The USA National Team applied 96 techniques took 141 points and exposed to 59 techniques. In the classifying competitions 66 techniques were applied; 88 points. Most executing techniques were leg tackle, gut wrench and head drug in the total competitions. In the classifying wrestling, most executing techniques were leg tackle, gut wrench and head drug. The Turkish Free-Style Wrestling Team executed mostly leg tackle and gut wrench; exposed to mostly leg tackle, gut wrench and double leg tackle.

Wrestlers choosed to take points without risk and to be successful it was necessary to take 7 points for one competition. To win a competition it's important to apply and not expose to a technique. National Turkish Free-Style Team didn't wrestle as offensively as their successful rivals. For the coming championships; it's necessary to train right and left offensive and defensive techniques. According to the position, advantages and disadvantages of the techniques have to be taught to the wrestlers. The trainers can regulate the wrestlers' training programs by considering the techniques used by the general, and also semifinalist and champion wrestlers in the championships.

S076**Adapted PE****THE COMPARISON OF SPORTMEN BLINDS STATIC AND DYNAMIC BALANCE ACTIVITIES WHO ARE BETWEEN 13-15 AGE GROUPS**

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The aim of research, to search the balance characteristics of blind young men and to determine the difference between the blind young men who make active sport and who doesn't make by means of static and dynamic balances.

In this research, 15 volunteer students, who have been dealing with activite sports of Sport Club in Ankara Göreneller Blinds Pri-

mary Education School had been choosen as experiment group. This group had been consist of total blind, 13-15 age (14.53±0.63) , height (167.27±6.49), weight (56.53±9.27) boys. As control group, 15 volunteer boy students had also been choosen from the same in the same age range with the criteria of non dealing with any sports activity at the moment of this study.

Flamingo balance test, Balancing test on one foot, Balance board test, Balance providing test, hopping test and dynamic balance test had been applied to both experiment and control group. Results had been anlyzed according to t-test and method of wilcoxon (matching test).

As the result of statistical analysis, values of balancing on one foot test, balance board test, balance providing test, hopping test had been found meaningful.(P<0.05).

Results of flamingo balance test and dynamic balance test had not been found meaningful.(P>0.05).

S077**Movements and Training****COMPETITION ANALYSIS OF 46. WORLD GRECO-ROMAN WRESTLING CHAMPIONSHIP**

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*Mehmet Akif Ziyagil

* Ondokuz University, School of Physical Education and Sports

The aim of this study was to analyze the competitions in 46. World Greco- Championship, and to examine the technique values of the National Turkish Team competitions. Also the aim was to analyze the competitions that determine the first eight teams (FETC) too. The Greco-Roman Championship was in the city of Patras in Greece at 6-9 December 2001. 334 greco-roman competitions were recorded, and the analysis were done by these recordings.

In this championship, most of the greco-roman competitions finished in official time and by points in all weight categories. Same status is validity for the Turkish team, USA team, FETC and the classifying competitions. More competitions finished in prolongation and by points in FETC competitions than the total competitions. In the greco-roman wrestling, total 1317 techniques were applied and 2231 points were taken; 593 passivity and 114 tying salto were performed. In the FETC competitions 238 techniques were applied; 402 points were taken. In the classifying competitions, 54 techniques were applied; 88 points were taken. Approaching to the final, the techniques and the points ratio were decreased. The Turkish Greco-Roman Wrestling Team applied 51 techniques took 84 points and exposed to 37 techniques gave 62 points . USA team applied 101 techniques took 140 points and exposed to 40 techniques gave 62 points . Most executing techniques were gut wrench, tying salto in the FETC competitions. In the classifying wrestling, most executing techniques were gut wrench, tying salto too. Wrestlers choosed to take points without risk and to be successful it was necessary to take 8 points in greco-roman for one competition. To win a competition it's important to apply and not expose to a technique. The National Turkish Greco-Roman Team was unsuccessful to apply a technique. They didn't wrestle as offensively as their successful rivals. For the coming championships; it's necessary to train right and left offensive and defensive techniques. According to the position, advantages and disadvantages of the techniques have to be taught to the wrestlers. The trainers can regulate the wrestlers' training programs by considering the techniques used by the general, and also semifinalist and champion wrestlers in the championships.

S078 Management And Organization

ORGANIZATIONAL COMMITMENT OF PHYSICAL EDUCATION TEACHERS

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Recently, the concept of organizational commitment (OC) has gained a lot of emphasis in organizational psychology and organizational behavior. OC has been defined as a bond or link of the individuals to the organization. OC can be considered as the relative strength of an individual's identification with and involvement in a particular organization.

According to the literature, OC can be divided into two divisions as; behavioral and attitudinal. Behavioral approach is concerned with the process by which employees come to develop a sense of commitment not to an organization, but to their own actions. On the other hand, attitudinal approach indicates that commitment is an attitude which represents the bond between an employee and an organization. Therefore, individuals with high level commitment tend to have a greater desire to remain in the organization and have better attendance than individuals with low level of commitment. Further, research also showed that individuals with high level commitment have greater desire to reach organization goals and adhere to organization policies.

With this general thrust, the purpose of this study is to investigate commitment of physical education teachers to their schools. That is, the study (a) described selected demographics variables of physical education teachers; (b) identified organizational commitment components; and (c) investigated the differences in these variables among subgroups defined by gender, age, marital status, and type of school.

For the purpose of this study, cross sectional method of survey was employed to analyze relationships among variables. The subjects of the study were physical education teachers (n=44) who were employed at elementary and high schools in Turkey. The data were collected by using scale of Organizational Commitment of Teachers (OCT) which was developed by Hosgorur in 1997 ($\alpha=.82$). In the study, validity of the instrument was also found sufficient ($\alpha=.68$). Further, the statistical analyses of the study included descriptive statistics, correlational analyses and one way analysis of variance (ANOVA) and Tukey Post Hoc.

The results of the study showed that there were statistically significant differences between independent variables (gender, age, marital status, and type of school) and three facets of organizational commitment (Alienation, Conformity and Settlement) ($p \leq .05$). The results of the study was further elaborated and discussed.

S079 Movements and Training

EFFECTS OF EXTERNAL AND SELF-CONTROLLED FEEDBACK SCHEDULE ON RETENTION OF ANTICIPATION TIMING

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Objective: The purpose of this study was to examine whether the feedback schedule controlled by the learner created an optimal environment for retention of anticipation timing.

Methods: Participants were randomly assigned to a Control (100% KR), 20% RF KR, Self-controlled and Yoked conditions. Ab-

solute constant error (|CE|) and variable error (VE) were calculated for four blocks of ten trials in acquisition phase and two blocks of ten trials in retention phase to analyze the subject's performances by repeated measures ANOVA.

Results: Analysis indicated significant main effects for groups in |CE| and VE in retention. Participants in the self-controlled condition performed significantly better on retention test than the control group.

Conclusion: The findings of this study gave support for the notion that feedback delivered at the request of the learner is more effective for the retention of anticipation timing for a longer period of time than feedback delivered to the learner passively.

S080 Health and Sports

METABOLIC RESPONSES TO A PNF EXERCISE

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Objective: This study was designed to determine the metabolic responses to a PNF exercise in healthy subjects.

Methods: A total of 32 male university students participated to this study voluntarily. Repeated contractions to dominant upper extremities were applied to the subjects. As an agonist pattern, flexion, adduction and external rotation and as an antagonist pattern extension, abduction and internal rotation was used. The PNF patterns were applied with 10 repetitions. Subjects performed a PNF exercise with their dominant hand with the help of a tester and heart rate (HR), blood pressure (BP) and blood lactic acid (La) levels of the subjects were determined before, immediately after and 1, 3 and 5 min. after the PNF exercise. Subjects' physical activity levels and ratings of perceived exertion (RPE) were also estimated by the Physical Activity Assessment Questionnaire (PAAQ) and Borg's Category RPE-Scale respectively.

Results: Results of one way ANOVA with repeated measures indicated significant differences in heart rate, systolic blood pressure, diastolic blood pressure and blood lactic acid levels. When means are taken into consideration it is seen that significant differences resulted from higher values obtained after PNF exercise (for heart rate $F(4,28) = 26.459$; $p=.000$, for systolic blood pressure $F(4,28) = 14.539$; $p=.000$, for diastolic blood pressure $F(4,28) = 3.101$; $p=.032$, and for blood lactic acid $F(4,25) = 14.407$; $p=.000$).

Conclusion: The results suggest that the PNF exercise patterns used in the present study was effective in increasing metabolic responses and these results can be used in programming PNF exercises.

S081**Health and Sports****A REGRESSION EQUATION TO PREDICT TRUE VO₂ MAX USING A FIELD TEST (20 METER SHUTTLE RUN)**

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Objective: The purpose of the present study was to examine the validity of using a 20 m multistage shuttle run test to estimate maximal oxygen uptake.

Methods: Twenty-two elite taekwon-do athletes (11 boys, 11 girls, members of the Turkish young national team), participated in the study. Shuttle run test performed according to Leger & Mercier (1988). Subjects run back and forth on a 20 m course and must touch the 20 m line; at the same time a sound signal is emitted from a prerecorded tape. Frequency of the sound signals is increased 0.5 km h⁻¹ each minute from a starting speed of 8.5 km h⁻¹. The respiratory gas exchange parameters were measured using portable Ergospirometry system (Oxycon Mobile, Jaeger, Netherlands) while performed shuttle running.

Results: Analysis of the test scores showed a mean score on Gas Analysis of 51,79 ml/(kg.min) and a mean score of 43,59 ml/(kg.min) on the bleep test. On average, the scores predicted by the bleep test were 16% lower than those for the Gas Analysis score. The correlation between the tests was significant at a level of $r = 0,931$.

Conclusion: VO₂ max can be predicted from shuttle run test scores, but not as indicated with the test package. In order to obtain the true score one must apply a regression equation.

S082**Health and Sports****THE EVALUATION OF THE IMPACT OF SOCIO-ECONOMIC LEVEL OVER THE HEALTH-RELATED PHYSICAL FITNESS OF GIRLS**

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Objective: The aim of this study is to investigate the impact of socio-economic level over the health-related physical fitness of girls between 8 to 10 years-olds.

Method: The number of the participants in the study was 489 students who were healthy female students from state and private schools.

The tests and measurements in this study was as follows, respectively: the measurement of weight, the measurement of height, sit-and-reach test, skinfold measurements, sit-up test, pull-up test and 1 mile run-and-walk test. In the identification of socio-economic level of the participants in the study, level of education of parents, the number of the children in the family, the living environment, whether the children have their own rooms at home, and the level of income of the family, which are socio-economic criteria, were taken into consideration.

At the statistical analysis of the data the mean, standard deviation, maximum and minimum values of the health-related physical fitness tests applied to the subjects were obtained and Correlation Analysis (Pearson) tests were used for the evaluation of the relationship between the health-related physical fitness tests and socio-economic level of the participants.

Findings: It was found that relationships between the socio-economic levels with the health-related physical fitness components of the participants; none significant ($P > 0,05$, $P > 0,01$) between the number of the children in the family with skinfold measurements and the levels of flexibility; between the living environment with the levels of flexibility; significant ($P < 0,05$, $P < 0,01$) between the other socio-economic structure components with health-related physical fitness components.

Conclusion: As a result, it can be said that the socio-economic level effects the health-related physical fitness in girls between 8 to 10 year-olds; who had a higher socio-economic level, the values of fatness and the abdominal strength were higher compared to those obtained from the girls who had a lower socio-economic level; and that the girls who had a lower socio-economic level yielded higher values of flexibility, below body strength and cardiovascular endurance.

S083**Health and Sports****EFFECTS OF HIGH ALTITUDE CLIMBING ON SOME PHYSIOLOGICAL PARAMETERS**

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* Abant İzzet Baysal University

As more people travel to high altitudes for economic or recreational purposes.

The purpose of this study was to examine the effects of climbing in high altitude on heart rate, blood pressure (systolic, diastolic and mean arterial pressure), body mass and % body fat on trekkers.

A total of 13 subjects who exercised twice a week, voluntarily participated in the study. The mean age and weight of the subjects were $34,53 \pm 7,46$ years and $80,18 \pm 9,59$ kg respectively. The data were collected at three different attitudes for five times in six days (two times at 1520m., two times at 3200m., and one time 4200m.).

For statistical analysis among different altitudes, Wilcoxon Signed Ranks Test was performed with the averaged values of the dependent variables (heart rate, blood pressure, body mass and % body fat).

The results of the study showed that there were statistically significant differences among measurements taken at different attitudes ($p < 0,05$) in terms of heart rate (Pre1520m.: $77,53 \pm 12,47$ Beat/min, 3200m.: $95,77 \pm 18,89$ Beat/min, Adp.3200m.: $97,92 \pm 11,83$ Beat/min, 4200m.: $99,15 \pm 10,73$ Beat/min and Post climbing 1520m.: $78,61 \pm 11,90$ Beat/min) and blood pressure, body mass (Pre1520m.: $80,18 \pm 9,59$ kg.; Post1520m.: $78,13 \pm 8,81$ kg.) and % body fat (Pre1520m.: $19,62 \pm 5,14$; Post1520m.: $17,73 \pm 5,54$) before climbing and after climbing taken. The results were further discussed and elaborated.

P001

Adapted PE

THE IDENTIFICATION OF MAIN SPORTS BRANCHES TO ORIENT PEOPLE TOWARDS SPORTS AND THE EVOLUTION OF SPORTS POSSIBILITIES - THE EXAMPLE OF KÜTAHYA

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The aim of this survey is; to orient people towards sports and to investigate what to do in order to become the sports widespread. In addition to search what kind of sports facilities should be established according to socio-economic and culture of Kütahya.

In our survey first of all it's tried to get the main sources. A group of 1140 people 468 of which is women and 672 men at the age of between 13 and 51 formed our survey's cosmos. On the other hand a public survey is carried out to these people.

The data which we got from our survey are analyzed in our SPSS for Windows 10,01 programme and frequency distribution table are done. Then these distributions are made dependent on χ^2 hypothesis test technique.

According to the survey data; the people orient to sports for health with % 46.1 as the first reason and the people told that they want to play football but there isn't any facilities with %26,8 for this branch.

Including these results; the number of sports facilities should be increased the number and quality of materials should be increased a cooperation should be done with youth and sports city management education institutions, private and local establishment and uncompleted buildings should be completed. At schools sports clubs should be formed and a cooperation should be made with school, family and the club. The number of physical education and sports courses and these courses' teachers should be increased.

These teachers' and trainers' activities should be looked after with a great care.

P002

Adapted PE

THE EFFECTS OF GOALBALL GAME AND MOVEMENT TRAINING ON THE PHYSICAL FITNESS OF VISUALLY IMPAIRED CHILDREN

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The purpose of this study was to determine the Physical fitness characteristics of visually impaired girls and boys (aged 10-14) who become to graded the B1, B2 and B3 in goalball and movement training 3 days a week, a day one and half hour for 12 weeks. Totally 72 students who 12 goalball, 14 movement training and 16 control group boy subjects, 10 goalball, 10 movement training and 10 control group girl subjects were assessed in this study.

Max VO₂, flexibility, handgrip, balance, long jump, push-up, anaerobic power, 20 m. sprint, right hand auditory reaction time and left hand auditory reaction time tests measured.

SPSS 12.0 program was used for statistical analysis. One-way Variance Analysis (Anova) and Tukey HSD tests was used to compare to pre-test and post-test of Goalball and movement training groups. Non-parametric Wilcoxon test was used to evaluate the differences between pre-test and post-test of Goalball group, movement training group and control group.

In conclusion, it was clearly seen that Goalball game improves the physical fitness levels of the visually impaired children.

P003

Adapted PE

HABITUAL PHYSICAL ACTIVITY IN VISUAL HANDICAPPED CHILDREN DURING SCHOOL AND FREE DAYS

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Objective: Activity diary is a physical activity assessment method of children and adults (1). Differences in physical activity during school and free days were reported in previous studies (2). The purpose of this study was to analyse habitual physical activity by activity diary during school and free days in visual handicapped students from primary school.

Methods: Thirty-four boys and 15 girls (11.22±1.91 yrs, 145.14±11.39 cm, 41.20±8.48 kg) were studied at primary school for visual handicapped. The 24-hours activity diary as physical activity assessment method was completed in students during two school days and one free day in a week. Teachers, physical therapy interns and parents were observed to students and they were filled the activity diary for each students. In diary, resting activities, self care, light intensity activities (listening lesson in classroom, studying lesson, games, listening music etc.), walking, moderate and high intensity activities (running, football etc.) were recorded. Activity time in each categories was summed in hours and it was expressed in hours/day. Student's t-test was used for statistical analysis.

Results: During school days resting, self care, moderate and high intensity activities were found less than free days ($p < 0.05$). In contrast, light intensity activities in school days were significantly higher than in free days ($p < 0.05$). No significant difference was found between school and free days in walking activities ($p > 0.05$).

Conclusion: It is suggested that visual handicapped students at primary school were more active during free days than school days.

P004**Adapted PE****APPLICATION OF PE TEACHERS' JOB EXPERIENCE TO DISABLED SCHOOLS**

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A research was made on study of work experience criteria and empathy levels of physical education and sport teachers who work in disabled schools. The research includes physical education teachers in disabled schools which depend on National Education Ministry (Istanbul, Kocaeli, Sakarya) a research which was developed by us and empathy skill scale which was developed by Dökmen (1988) were applied on the teachers.

At the end of the research in the disabled schools emphatic approximaty of the Physical Education Teachers was accepted high and seems each other.

In this study 15 students took part who have mental insufficiency in various kind from Canada Education and application School, It has been applicated seven motoric sport tests before exercises programme. (20 m. speed, 400 m. resistance, elasticity, healt ball throwing, vertical jumping in stand, quick strength – balance – coordination, double feet long leap standing). Than it has been applicated seven different motoric sport tests after 10 weeks exercise programme and they have been used in study forestest results and last test results.

The datas received, analyzed in with the method of Man Whitney U and Pearson Corelasyon.

As a result, when we comparise the before exercise and after exercise motoric test results of the students who has mental insufficiency (n=15) who took part in this study; there is a meaningful relation between the results of 400 m. and vertical jumping. A nonsense correlation has been appeared among height, vertical jumping, long leap standing, elasticity, weight, health ball throwing and 20 m.

P005**Adapted PE****EVALUATION OF WHEELCHAIR BASKETBALL PLAYERS IN REGARD TO TRAINING CHARACTERISTICS**

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The objective of this study is to analyze before-training warming-up and after-training cooling-down activities of wheelchair basketball players in Turkish league. The study was carried out on 33 players, the mean age of whom is 26.6±5.95. It was observed that while 60% of those players spend 3-5 hours a week for training, 82% do training 2 days a week. Warming-up activity is done by all players while only 20% do cooling-down activity.

There is no significant difference of training time among players who have different handicaps (amputation, spine injury, poliomyelitis sequel) (P> 0.05). No one used any techniques like stretching or strengthening aided by special equipment. Some teams do training with techniques but only as a short warming-up followed by a match.

In the study it was also evaluated how often players use some warming-up techniques.

P007**Adapted PE****COMPARISON OF A 1. LEAGUE AND A 2. LEAGUE TURKISH PHYSICALLY DISABLED WHEELCHAIR BASKETBALL TEAM PLAYERS' PHYSICAL APPROPRIATENESS PARAMETERS**

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This study was planned to search and compare the physcial conditions and anthropometrical characteristics of the wheelchair basketball teams playing first and second second league.

From these two teams BJK had 12 players with the mean age 25.17±4.35 (between 18 – 33) playing the first league and OFSK had 9 players with the mean age 24.56±5.43 (between 17 – 34) playing in the second league.

Initially we recorded the subjects' age, years of sports experience, duration of the disability, and clasification level. Then after we compared their pulse, systolic and diastolic blood pressure, manual muscle test, posture analysis, muscle shortness test, anthropometric length and circumferences, body fat percentage, handgrip test, 20 second push-up score, and 3 kg medicine ball throwing distance values.

The data were classified and statistically analysed by SPSS for Windows 11.5. The difereces between variables were evaluatedd by chi-square test and also by unpaired student t test. In conclusion when we compared two teams we found differences (p=0.014) in years of sports experience although we could not determine any difference in physical conditions and anthropometrical characteristics.

P006**Adapted PE****COMPARISON OF THE BEFORE AND AFTER EXERCISE MOTORIC PERFORMANCES OF THE MENTALLY DISABLED CHILDREN**

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The aim of the this study is to search comparasing the before exercise motoric sport test results of the age of 9-15 mental insufficient children and received after 10 weeks exercise motoric sport test result, the effects of physical education and sport on the children who have mental insufficiency.

P008**Adapted PE****THE STUDY OF THE LEVELS OF PLAYING IN CLUBS OF THE STUDENTS THAT ATTEND SOCCER COMPETITIONS AMONG THE STATE SCHOOLS*** Muharrem Öner , *Ertuğrul Bulut* *Ministry of Education, Teacher of Physical Education*

This study aims to search the levels of the students playing in clubs and to find out the reasons of not playing in clubs and to contribute to provide cooperation between the schools and clubs.

We tried to reach the primary sources in our study. Primary and high schools students that are at the age of between 10 and 18 who attend the soccer competitions between the schools in Kütahtaya. Form the scope of our study. We made a survey to 10 primary school teams, 126 students, 18 secondary school teams, 294 students, 12 high school teams, 214 students, totally 40 school teams, 634 students.

The obtained data in the study is calculated in SPSS For Windows statistics pocked program then frequency and percentage ratios are presented as tables.

According to the findings of the study, %39.6 of the students who attend competitions among schools play soccer in clubs, %60.4 of them do not play in clubs. For not playing in any clubs, %50.2 of them stated that they have a lot of lessons, % 19.3 there are not any clubs around of their houses, %19.6 of their families do not agree them to play soccer and % 6.3 of them goto courses.

According to these results, we suggest that the format that is organized by Education of Ministry should be checked, the number of competitions should be increased as a few times in a year, and the variation of the competitions should be increased, school sports should be worked on more than clubs sports, and schools should form clubs as soon as possible, special tournaments should be held on national festivals by the city league committee, a protocol should be made between National Education and P.E.S.H.S to send the second class students of the training department to the schools to train school teams.

P009**Adapted PE****THE EFFECT OF TRAINING ON EDUCABLE MENTAL RETARDED CHILDREN'S SOME MOTOR ABILITY*** Mustafa Karahan , *Rifat Demir* *Niğde University, School of Physical Education and Sports*

This study was planned to investigate with purpose the effects of training on Educable Mental Retarded (EMR) children's some motor ability. The mean values of EMR eleven male children participated in this study that is old, height and IQ were 14 year, 154 cm, 59.1 point respectively.

Some motor ability tests were applied to EMR children before and after three days from training program which have been suggested by Hastad and Lacy (1989) and Vannier and Fait (1975). The training program that's three times of the week and ten week period were applied to EMR children The differences between pre and post tests findings were analyzed with Paired Sample t test.

According to the results of study, it was no founded statistically the findings of balance and reaction time ($p > 0.05$). But it was

statistically significant differences in values of medicine ball throwing, sprint 25 yard, general body flexibility, standing long jumping and touching of discs ($p < 0.01$).

In conclusion, it was found that has a significantly effect on EMR children's some motor ability in this research when they were practiced training programs systematically.

P010**Behavioral Sciences****MOUNTAIN SKIING IN OLD TURKISH ETHNIC TRIBES AND STATES*** Hüseyin Salman* *Marmara University Arts and Science Faculty*

Mountain skiing, one of the most popular kinds of today's sports, was very well-known and widely performed by Turkish ethnic tribes in old times. Old Turkish clans and ethnic tribes did skiing in the Central Region of Siberia, on the snowy hills of the Sayan, Altay, and Tanrı Mountains during the winter. These Turkish ethnic tribes became famous in the area as they did skiing mainly for sports but also for hunting, trading, and defending against enemies.

According to Swiss Professor, Dr J.J Hess, mountain skiing, which is a Minor Asian invention, is learned by Finnish tribes who lived as neighbors of Turkish tribes in the valley of Ural Mountains. Finnish tribes introduced this sport to the people living in the Scandinavian Region. Then, skiing was spread to the Middle and Western Europe by the Russian and Serbian tribes later on. The Historical Tribe Migration made it obvious that skiing sport was spread by old Turkish tribes in that particular area. The philological evidence of the time also supported this spread.

As a result of the research done about seven Turkish clans and three Turkish ethnic tribes, it was determined that, mainly the Kirghiz, Bayirkus, and Basmils, did skiing especially for the purpose of hunting. The research also showed that a specific technique was developed in order to facilitate skiing and to gain extra speed. Furthermore, it was found that at the beginning skiers in Turkish clans wore skis made of cattle and horse bones instead of wooden skis on icy field. It is also clear that they changed the types of skis they used to prefer and started to wear peeled wooden skis as seen in the Shorlus.

This sport was first performed by Minor Asian Turkish tribes before and after the middle Ages. Then, skiing was learned by the other neighbouring ethnic tribes, mainly the Mongols. We consider that this support was brought to Anatolia by the Oghuz clans through the Tanrı Mountains and then practiced until today. Related evidence and documents support this historical event. However, the Anatolian Region is not in the domain of our research paper both chronologically and regionally. Thus, we leave this issue for a further study.

P011**Behavioral Sciences****A STUDY ON THE SOCIO-ECONOMIC CONDITIONS OF ELITE ATHLETES IN TURKEY*** Hacı Ahmet Pekel , *Latif Aydos, *Mansur Onay* *Gazi University, School of Physical Education and Sports*

The aim of this study was to investigate the socio-economic status of athletes in Turkey.

The scope of the research covered sportsmen and sportswomen involved in athletics in Turkey. The sample group of the study consisted of 216 people competing in the 1st and 2nd athletic leagues of Turkey.

Within the framework of the study, a survey was conducted in order to gather information about the personal details of the participants as well as information on their and their families' educational and socio-economic background and whether they had a sponsor or not. The frequency and percentage distribution values were calculated and the chi-square technique was employed in order to identify the differences during the course of the evaluation of the data ($p < 0.01$, $p < 0.05$ was range of significance). The tables were evaluated according to the frequency and percentage distribution values.

Although elite sportspeople involved in athletics, an amateur branch, move along with a professional approach end up gradually defecting from the world of business for the sake of achieving the best possible performance, some others are either quitting sports at earlier stages of their sports careers, or are attaching secondary importance to sports, giving priority to their professions as compared to the sports fields in which they are involved due to a lack of funds from sports clubs and the insufficiency of the income they get from sports activities. This situation brings down the possibility of better performance and a higher level of achievement in the field of sports for which seconds and milliseconds matter. Moving on this standpoint, various suggestions as to how to attain better performance and achieve a higher level of success have been made.

P012

Behavioral Sciences

COMPARISON OF PRE-COMPETITION AND POST-COMPETITION ANXIETY LEVELS OF VOLLEYBALL PLAYERS

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Objective: The purpose of the study is to identify what kind of changes a woman volleyball team players experience 15 days before, a week before, 3 days before, a day before, 2 hours before and 20 minutes before, immediately after in dressing room, 2 hours after and a day after the competition in competitive anxiety and its components.

Methods: A total of 14 female athletes to be involved in Vakıfbank Güneş Sigorta Woman Junior Volleyball Team (12.00 ± 0.91) participate in this study. Before and after the competition athletes are administered The Competitive State Anxiety Inventory-2 Children's Form (CSAI-2C). Collected data were analyzed using descriptive statistical and Pearson Product Correlation Coefficient.

Results: As the competition time come closer, athletes' Cognitive and Somatic Anxiety scores increase and Self Confidence scores decrease. After the competition while Cognitive and Somatic Anxiety scores decrease, Self Confidence scores increase. There were negatively significant relationships among Cognitive Anxiety, Somatic Anxiety and Self Confidence 15 days and 3 days before the competition ($p < 0.05$). There were positively significant relationships between Cognitive Anxiety and Somatic Anxiety, but negatively significant relationships among Cognitive Anxiety, Somatic Anxiety and Self Confidence a day before the

competition ($p < 0.05$). There were positively significant relationships between Cognitive Anxiety and Somatic Anxiety 2 hours before the competition, but negatively significant relationships between Somatic Anxiety and Self Confidence 20 minutes before the competition ($p < 0.05$). There were positively significant relationships between Cognitive Anxiety and Somatic Anxiety immediately after competition in dressing room ($p < 0.05$). There were positively significant relationships between Cognitive Anxiety and Somatic Anxiety, but negatively significant relationships between Cognitive Anxiety and Self Confidence a day after the competition ($p < 0.05$).

Conclusion: Results show that, state anxiety measured with CSAI-2C and anxiety components change after and before the competition.

P013

Behavioral Sciences

COMPARISON OF SELF-ESTEEM LEVEL IN FEMALE AND MALE ATHLETES

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The aim of this study was to compare self-esteem level of male and female athletes.

Hundred university students (50 male, 50 female) from Akdeniz University School of Physical Education and Sport, who had past sport experiences, between the ages of 17-27 (21.77 ± 2.08 years) voluntarily joined our study. Rosenberg Self-Esteem Scale were applied to all subjects who joined this research.

It was determined that there were no differences in Rosenberg Self-Esteem Subscale between male and female (Female: 0.96 ± 0.95 ; Male: 1.22 ± 1.30) ($z = -0.66$).

According to these findings, Self-Esteem which affects sport performance was not a significant difference among male and female athletes.

P014

Behavioral Sciences

THE DEMOGRAPHIC PROPERTIES OF THE SPORTSMEN IN 8-12 AGE GROUP, THEIR THOUGHTS ON ATHLETISM AND THEIR MOTIVATIONS

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Purpose: The purposes of the project are to determine the thoughts of 8-12 age group students on athleticism and the final phase we are in, to collect the data to make new evaluations and evaluate the properties of the student sportsmen who join to competitions.

Method: The National Education District Directorate sent written information to all the schools in İstanbul about the athleticism development project. 395 of 1500 students had the right of joining to final competition and questionnaires were applied to 196 students individually, 76 girls and 120 boys. They were asked various questions and the results were evaluated by means of the SPSS program.

Result: 80 % of students state that the sport does not impede their lessons, 63% of students make the sport in places near to their homes, 97% state that they enjoy joining to the competitions,

3 athletes do not know any athlete name, 36% know the names of Süreyya and Elvan, 55% know only the name of Süreyya. 90% of students do not know the name of any foreign athlete. 45% of students state that their teachers encouraged them to make sport and 28% state they themselves begin to make sport. The families have an effect in the rate of 15%. 56% of children have someone in their families making sport. 55% of them are sisters-brothers and 45% parents. Only 39% of the persons who join to the competitions make athleticism.

Discussion: Today, every athlete knows at least one athlete name. This is a very positive situation when compared to past years but they have still difficulty in giving the second name. Almost everybody knows Süreyya. Elvan is not known much. Nobody can give the third name. We hope we will remember Eşref Apak in the near future. Teachers still take place in the center position in encouraging students to make any sport. We must strengthen the teachers and try to attract them to athleticism. The rate of persons who make sport in the family is still very low. 44% of persons do not have anybody in their family who make sport.

P015

Behavioral Sciences

ATTITUDES OF TURKISH UNIVERSITY STUDENTS TOWARD OBESITY: GENDER AND SPORT PARTICIPATION COMPARISON

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Objectives: To examine attitudes toward obesity and to see how these attitudes were related to both gender and participation in sports in a sample of Turkish university students.

Methods: 136 athlete (52 females and 84 males) and 100 non-athlete (41 females and 59 males) university students participated in the present study voluntarily. A questionnaire composed of four sections was employed to investigate the participants' attitudes toward obesity. The five sections were demographic information, 10-items Restraint Scale, drawings and personal opinions about "how people should look and what they should weigh". Two (gender) by two (athletic status) ANOVA and chi square test were used to investigate the differences between female and male athletes and non-athletes.

Results: Results indicated that females had significantly higher Restraint Scale Scores than males, however males wanted to be larger than the pictures they picked as most like them. Results also indicated that both females and males find themselves thinner than most of the women and men they know. Significant differences were also obtained in two items of personal opinions "have you ever tried to lose weight?" and "it is worse to be fat if you are a child or teenager" between males and females. Athletes on the other hand, indicated that being overweight was equally bad for men and women more than non-athletes.

Conclusion: Turkish university students did not differ substantially from their Western counterparts in their attitudes towards weight and obesity.

P016

Behavioral Sciences

COMPARISON OF PRE-COMPETITION AND POST-COMPETITION ANXIETY LEVELS IN NATIONAL FEMALE RHYTHMIC GYMNASTICS TEAM

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Objective: The purpose of the study is to identify what kind of changes a National Female Rhythmic Gymnastics Team players experience 2 days before, 2 hours before, 1 hour before, 20 minutes before and 2 hours, 1 day after the competition in competitive anxiety and its components (cognitive anxiety, somatic anxiety and self confidence).

Methods: 7 athletes having age average of 11.57±0.90 participate in this study. Before and after the competition athletes are administered A Children's Form of the Competitive State Anxiety Inventory (CSAI-2C). Collected data were analyzed using descriptive statistical and Pearson Product Correlation Coefficient.

Results: As the competition time come closer, athletes' cognitive and somatic anxiety scores increases and self confidence scores decreases. After the competition while cognitive and somatic anxiety scores decreases, self confidence scores increases. There were significant difference between Somatic Anxiety and Self Confidence as the competition day neared ($p < 0.05$). On the contrary, there were no significant difference with anxiety components after the competition day ($p > 0.05$). There are relationships among Cognitive Anxiety, Somatic Anxiety and Self Confidence in athletes. But these relationships change according to level of pre and post competitive anxiety.

Conclusion: Results show that, state anxiety measured with CSAI-2C and anxiety components changes after and before the competition.

P017

Behavioral Sciences

THE RELATION OF EMPATHY AND TEAM COHESION IN TERMS OF TEAM SPORTS

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The aim of this study is to determine the relation between the Empathy and Team Cohesion of the players who do team sports. Furthermore, this study is done to determine the levels of the Empathy and Team Cohesion in terms of different varieties of the players.

Dealing with the branches of Basketball, Handball, Volleyball and Football 216 men and 189 women, totally 405 players between the ages of 15 and 43 were participated for this study. "Empathy in Sport surrounding" and "Team Cohesion" measurements were used in the study.

In the statistical analysis of the data, among the total points, Person Correlation coefficient, one way variance Analysis and Tukey-HSD Post-HOC test were done.

According to the results of this study parallel relation with the rate of %30 between the Team Cohesion and Empathy was found out. It was determined that the Empathy level of the Volleyball and Basketball players is higher than the empathy level of the Handball and Football players ($F(3,401) 6,5673$; $p < 0.05$). The Team Cohesion of the Volleyball players is higher

than the Team Cohesion of the Handball players. Also it was seen that the Team Cohesion of the Football players is higher than the Team Cohesion of the Handball and Basketball players ($F(3,401) 7,8710$; $p < 0.05$). It was found out that the Empathy level of the women is higher than the Empathy level of the men ($F(1,401) 4,4753$; $p < 0.05$). We have obtained that the Team Cohesion of the non- experienced players is higher than the Team Cohesion of the experienced players ($F(2,402) 3,4533$; $p < 0.05$). It was found out that the level of the Empathy and Team Cohesion of the team players who have educated mothers is higher than the level of the Empathy and Team Cohesion of the team players who have non-educated mothers ($F(3,401) 4,3122$; $p < 0.05$), ($F(3,401) 2,9418$; $p < 0.05$).

P018

Behavioral Sciences

AN ETHICAL APPROACH TO THE HANDICAPPED AND SPORTS

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Objective: Ethical analysis of the handicapped concept by philosophical thinking and determining the importance of sport facilities in the life of handicapped through this approach.

Methods: Defining the difference between the meanings of the words "handicapped" and "disabled"; and searching the current models of understanding handicapped; trying to realize differences between these models; stating the role and the duties of the society in the life of disabled especially for the sports activities.

Results: The main problem of the handicapped is not totally related to medicine, but directly related to life. The medical model, which is accepted up to now considers the problems of the handicapped only with the medical approach. So, medical model is inefficient to comprise sports activities, which are very important for the rehabilitation of the handicapped and integration of them into life. But social model considers life totally, so that it is more adequate to comprise the importance of sports facilities.

Conclusion: Sports facilities of the handicapped people are one of the major rehabilitation activities and should be considered by the social model.

P019

Behavioral Sciences

LICENSED TEAM MERCHANDISE IN SPORT: A RESEARCH ON HIGH SCHOOL STUDENTS IN ESKİŞEHİR

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Nowadays, consumers are spending huge sum of money to have licensed sport team licensed merchandise. Licensing is an effective way to create incentives for consumers to buy a product. One of important research subjects in sport marketing academic field is that sport consumers buy licensed sport team merchandise.

Licensing, a topic too frequently omitted from sport management and marketing, has become a primary responsibility of both amateur and professional sport administrators. Application

of the licensed sport team merchandise in sport industry is one of the most common and developing subjects. Recently, interest in licensed sport merchandise of consumers is explained with billions of dollars.

Sport team licensed merchandise is purchased for various reasons by sport consumers. Sport consumers can exhibit many of characteristics about buying licensed merchandise. To examine impulse tendencies to purchase sport team licensed merchandise, an exploratory investigation involving a sample of high school students was conducted.

Results revealed that product quality is the most important factor among six factors for impulse buying. Financial support willingness to soccer clubs is the second main factor for buying licensed product. The last factor in impulse buying licensed merchandise is price of product. Mean score of all factors is above of 4 point ("1" never important, "5" very important scale). In the ownership of range of licensed products, team uniforms are in the first place with 33,7 %. Licensed stationery goods are in the last place with % 5,1. It is found that many sport goods which students in high school have they, are unlicensed. The other finding in the study is that the students in high school mostly bought the range of sport goods from unlicensed stores or street peddlers.

There are significant relationships between some demographic variables and the ownership of licensed merchandise and buying licensed merchandise. There are a significant relationship between average household income and financial support willingness to soccer teams, product prestige and product price. Many factors of buying licensed merchandise (financial support, product prestige, product guarantee and quality) differentiated according to team fans. There are also significant relationships between licensed merchandise ownerships and demographic variables.

P020

Behavioral Sciences

EFFECTS OF BIOFEEDBACK AND MENTAL TRAINING ON SITUATIONAL AND PERMANENT ANXIETY IN 12-14 AGE GROUP

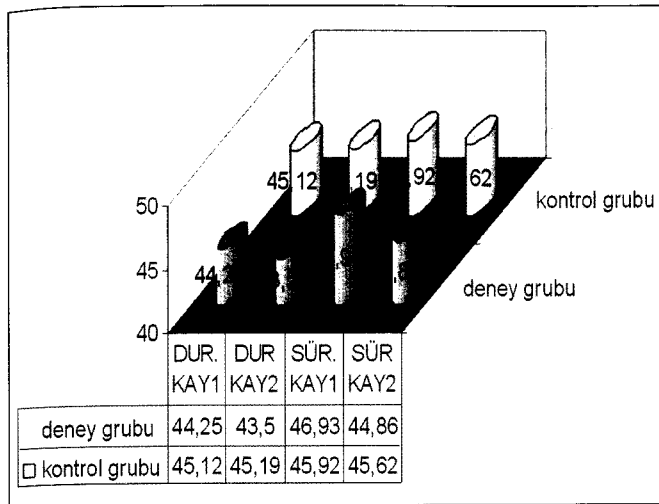
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* Kocaeli University

Purpose: The purpose of the study was to investigate the effect of the mental training with Biofeedback on state and trait anxiety in 12-14 ages children.

Material-Method: In content of our experiment there are control group and experiment group. Control group average age is $x: 12,88 \pm 0,33$ and there are 26 people in the experiment group. Experiment group average age is $x: 12,75 \pm 0,89$ and there are 28 people in the experiment group. In the study, State Trait Anxiety Inventory (STAI) was used for measuring anxiety and Procomp Infinity Biofeedback device was used for Biofeedback trainings. . Descriptive statistic techniques and Mann-Whitney U and Wilcoxon were used for statistical analysis. Significance was set at the $p < 0,05$ level. Data was analyzed by SPSS for Windows.

Results: In experiment group, it was observed statistical differences between the pre-test and the post test trait anxiety points. However the same observation could not be observed for state anxiety points. In the control group there were not any significant differences between the pre-test and the post- test anxiety points.



Deney ve kontrol gruplarının durumluk ve sürekli kaygı ön test son test ölçümleri.

Conclusions: The result of statistical analysis shows that, mental training with biofeedback only affected trait anxiety statistically.

P021 Behavioral Sciences

COMPARISONS OF ATTENTION AND CONCENTRATION LEVELS AMONGST ATHLETES FROM VARIOUS ATHLETIC STATUS AND DISCIPLINES

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It was aimed to compare of concentration and attention levels of athletes from various athletic status and disciplines. Subjects from individual (Track & Field, Swimming and Karate; n=25) and team sports (Basketball, Volleyball and Handball; n=44) were participated in this study. Attention and concentration were measured with "Signal Detection Test" (SDT) and "Vienna Determination Test" (VDT) respectively. To evaluate focus in attention "Stroop Task" (ST) was also used. ANOVA was used for descriptive statistics and Tukey for post-hoc analysis. P-values ≤ 0.05 were regarded as significant. False response amount in VDT was higher in Karate athletes as compared with others. Not in SDT but in ST, a variation was observed amongst disciplines. Least and most false responses in first and fourth interval of ST were obtained by volleyball players and Karate athletes respectively whilst basketball, handball, volleyball and swimming athletes had no false in the third interval. There was no difference in median of reaction time between genders in SDT. VDT results of national team members and others were not differentiated also. In contrast, contrary to expected, national team members had more false in VDT. In SDT and ST no significant difference was observed between national team athletes and others. Athletes from team sports found more succesfull in reaction time and attention than athletes from individual sports. These results were suggested that VDT has not a high validity in evaluating attention while SDT has. Moreover, ST might be considered effective to determine focus in attention.

P022

Behavioral Sciences

RESEARCH OF THE MALE VOLLEYBALL PLAYERS' CREATIVITY LEVELS WHO STUDY AT UNIVERSITIES IN MARMARA REGION

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In this study, it was aimed to find the creativity levels of the volleyball players who are both studying at universities and playing volleyball actively. Raudsepp's "What is your creativity level?" scale was used during this study. This scale had 50 questions. The datas were analysed in the SPSS 7,5 package programme. It is found that 2.6% of them are very creative, 63.5% are upper medium, 32.2% are medium average and 1.7% are lower medium according to this scale. It is possible to understand that the creativity levels of the individuals who play volleyball improve in a positive way.

Because of the education system's strict and centralist structure, the individuals and students need applied programs which improve creative problem solving skills. And also it is thought that there should be some meeting among school-family-individual. Sports lectures must be much more than the ones that occur now. We believe that students should do sportive activities in their creativity level.

P023

Behavioral Sciences

RESEARCH OF THE MALE VOLLEYBALL PLAYERS' HOPELESSNESS LEVELS WHO STUDY AT UNIVERSITIES IN MARMARA REGION

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In this research, it was aimed to find the hopelessness level of the volleyball players who are both studying at universities and playing volleyball actively. 115 volleyball players were used (who are 21 ± 2 years old). To collect data, BECK hopelessness scale was used.

The datas were analyzed in SPSS 7,5 package programme. It is found that 65.2% of the players have low level, 31.3% have average and 2.6% have high hopelessness level. The reason to find why volleyball players have low level of hopelessness is; the players have team soul and responsibility because of the volleyball (it is a team game), they live the success and failure all together, they learn to believe in their team friends, closeness and coherency in the social relationship, self-confidence to take responsibilities and facilities that are given to the individuals from clubs and universities.

P024 Behavioral Sciences

THE STUDY OF GOAL SETTING PROGRAM EFFECT ON THE ATTRIBUTIONAL STYLE AND ACHIEVEMENT MOTIVATION

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The aim of this research, is to compare and study of the effect of the programs goal setting, attributional and complex retraining on the amount of self esteem, self efficacy, attributional style and achievement motivation of the male students in guidance schools. Therefore, 240 students in guidance schools were randomly selected and divided in to four groups. 1) The group that had goal-setting program. 2) The group that had attributional retraining. 3) The group that had complex program (goal setting and attributional retraining) 4) control group. At first by means of pre test and base line questionnaire the amount of attributional style, self-efficacy, and achievement of the testees was determined. Then each group except control did selected activities for a period of 16 sessions. At the end of programs, post test was also done and the data was analyzed through statistical methods of variance analysis T and contributory Tokay test using SPSS software.

P025 Behavioral Sciences

THE RELATIONSHIP BETWEEN MOTIVATIONAL VARIABLES AND COGNITIVE STATE ANXIETY, SOMATIC STATE ANXIETY, SELF-CONFIDENCE

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* Ege University School of Physical Education and Sports

Purpose: The purpose of this study was to assess the relationship between motivational variables and cognitive state anxiety, somatic state anxiety, self-confidence. The participants were 312 athletes aged 21.6 ± 2.4 yrs, performing in a wide variety of sports.

Method: Motivational variables were assessed using the "Sport Motivation Scale" and the "Task and Ego Orientation in Sport Questionnaire". The "Competitive State Anxiety Inventory" was used to determine cognitive anxiety, somatic anxiety and self-confidence levels.

Results: To examine whether motivational variables could be considered significant predictors of competitive anxiety, step-wise regression analysis was conducted. The results revealed that amotivation was significant predictors for cognitive state anxiety, somatic state anxiety and self-confidence. For somatic state anxiety and self-confidence, gender was a significant predictor. Extrinsic motivation negatively predicted self-confidence.

Conclusion: The findings indicate that motivational variables may be accurate as predictors of competitive anxiety.

P026 Behavioral Sciences

SPORTS IN GYMNASIONS AND THE BEGINNING OF PREVENTIVE MEDICINE

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Objective: Trying to understand the meaning of the sport facilities in the gymnasions (BC 300-50) by a medical historical

approach at making the connection of these facilities with our current understanding of preventive medicine.

Methods: Searching and collecting information about the activities in gymnasions in the Hellenistic period; and comparing these facilities with the meaning of preventive medicine we know today.

Results: The main target of sport facilities in gymnasions was to improve public health and making strong people. According to contemporary sports and physical activities are considered as the main components of preventive medicine. So, hundred years ago; in gymnasions preventing public health by sports facilities was popular. The workers in gymnasions were serving like health assistants for preventive medicine.

Conclusion: The sports facilities in gymnasions can be determined as preventive medicine activities which are very popular today.

P027 Behavioral Sciences

A STUDY FOR THE SOCIOLOGICAL AND PSYCHOLOGICAL VIEW OF SOCCER TEAM FANS ON PROVOCATIVE EVENTS

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In this study, a questionnaire was made on soccer team supporters who came to watch Gaziantepspor-Trabzonspor and Gaziantepspor-Galatasaray games in Gaziantep Kamil Ocak Stadium. A total of 517 randomly selected supporters (463 male and 54 female) whose ages are between 20 and 40 were evaluated in the questionnaire. It was seen that most of the supporters were students. In this study, it was found that 19.2% of the people were involved in fighting actions, 11.6% think that cussing is a right behavior, 5.6% of the people bring dangerous equipments while coming to the game. 50.3% of the people says that the security in the stadium was enough. It was also found that 11.6% of the people who filled the questionnaire had psychological problems and 6.2% of them were already been treated. According to 51.1% of the people the most provocative action was referee's wrong decision or being biased. 51.7% of the people think that fences must be removed in the stadiums. We asked the people that what will be your reaction when the referees decision is wrong?. The answer of the 42% of the people was cussing. The percentage of people who were abused by their families in their childhood was 14.1%. 10.3% of the people supported cussing and physical actions in the games. All of these statistical analysis were conducted by using SPSS 10.0.

As a result, In order to decrease physical actions in the stadiums, cussing problem must be solved. To solve this problem, we think that the number of females and kids coming to the games must be increased and encouraged. The punishments could be increased to discourage the people. Security cameras could be placed in the stadiums to identify the provocators. Some programs could be organized in the stadiums to decrease the stress of the people and the environment such as concerts, shows, distribution of flowers.

P028**Behavioral Sciences****AN INVESTIGATION OF TURKISH SOCCER REFEREES' DECISIONS TO COMMENCE THEIR OCCUPATION*** Melih Balyan, ¹Timuçin Gençer* Ege University Department of Physical Education and Sports¹ Marmara University Department of Physical Education and Sport

Soccer referees are the most important elements in the pitch who pursue to provide the reliability of the game. The purpose of this study is to determine which decisions had effected Turkish soccer referees to commence this occupation. In this study a developed questionnaire for understanding how and which purposes do Turkish referees commence this occupation is applied to 130 referees (64 elite and 66 local) who work in Izmir region. As a result of the findings, it has seen that 63.1% of the Turkish referees who attend this study had commenced this occupation by coincidence. Main purposes of Turkish referees to commence this occupation were to value their leisure times (50%) and to gain some additional income (36.1%). It has necessarily seen that referees who have that much important role in millions dollar of soccer industry has been provided to involve in this occupation with the help of realistic strategies.

P029**Behavioral Sciences****COMPARISON OF SPORT RELATED ACHIEVEMENT MOTIVE IN FEMALE AND MALE ATHLETES*** K. Alparslan Erman, A. Şahan, S. Can* Akdeniz University

The aim of this study was compare sport related achievement motivation level of male and female athletes.

Hundred University students (50 male, 50 female) from Akdeniz University School of Physical Education and Sport, who had past sport experiences, between the ages of 17-27 (21,77±2,08 years) voluntarily joined our study. Motive to avoid failure, power motive, motive to achieve success subscale of Willis Sport Related Motive Scale have been applied to the subjects.

It was determined that there were no differences in three subscale of Willis Sport Related Motive Scale between male and female (p>0,05).

According to these findings, achievement motivation which is affects sport performance is not differ among male and female athletes.

P030**Behavioral Sciences****THE RELATIONSHIP BETWEEN PRE-COMPETITIVE STATE ANXIETY AND PERFORMANCE OF TAEKWONDO ATHLETES*** Cem Çetin, Metin Lütfi Baydar, Mustafa Çetin* Süleyman Demirel University, Department of Sports Medicine

Introduction: The purpose of this study examines the relationship between anxiety and performance from a cognitive-behavioral perspective.

A great deal of research has been devoted to the effect of anxiety on sports performance. Researchers have found that competitive

state anxiety is higher for amateur athletes in individual sports compared with athletes in team sports (1). In addition, participants in individual non-contact sports have been found to report lower levels of state anxiety than participants in individual contact sports (2).

Method: 66 (49 male, 17 female) subjects responded to the Sport Competition Anxiety Test (SCAT) immediately prior to national taekwondo competition. Subjects were categorized in to groups showing high, medium and low competitive anxiety. SCAT level of the athletes and the win and lose percentages of 2 contests at the same day were compared.

Results: Most of the athletes showed average or low anxiety scores, however, no significant relationship between gender and anxiety score were encountered statistically (P>0,05).

Gender and SCAT level of Taekwondo athletes

SCAT level	Male n(%)	Female n(%)	Total
Low	17 (34,7)	3 (17,6)	20
Average	30 (61,2)	12 (70,6)	42
High	2 (4,1)	2 (11,8)	4
Total	49	17	66

SCAT level and athletic performance were not significantly associated. Chi-squared Test for independence were performed. (Chi-square: 3.162 and the P value is 0.2058).

SCAT level and win and lose percentage of athletes.

SCAT level	Win n(%)	Lose n(%)	Total
Low	18 (45)	22 (55)	40
Average	46 (54,8)	38 (45,2)	84
High	2 (25)	6 (75)	8
Total	66	66	132

Conclusion: In this study, the athletes whose anxiety scores were high or low were observed higher lose percentages, however, no significant relationship were determined between SCAT level and athletic performance.

P031**Behavioral Sciences****RESEARCH ABOUT THE FACTORS OF AMATEUR AND PROFESSIONAL FOOTBALL PLAYERS BEING AFFECTED FROM THE SPECTATORS*** Cengiz Arslan, *Fikret Ramazanoğlu, *Eyüp Yıldırım,¹ M.Fatih Karahüseyinoğlu* Firat University School of Physical Education and Sports¹ Marmara University School of Physical Education and Sports

There are many reasons that affect the plays of football players and improve their performance in a positive or negative way. It is undeniable reality that one of these factors is the spectators and their behaviours. For this reason, football players are affected from the spectators and their behaviours is tried to be determined with this research.

This research includes 90 professional and 120 amateur football players, aged between 20 and 30, playing in Turkish amateur league, 1st league and super league. An early prepared questionnaire consisting of 16 questions, was made with the players face to face in order to develop the subject.

The questionnaire consists of 16 questions where same situations like 'yes-no-makes no difference' and 'positive-negative'. The analysis of the information gathered from the questionnaire

was made with SPSS 10.0 computer programme and considered with 'X²' test in $p < 0.05$ level of significance. The results, then were converted into tables, and (%) numerical comparisons and comments were made over them.

It can be seen through the research which were made to determine the situations where players are affected from the spectators that the spectators affect the performance of the players in games. The players are expecting the spectators who supports them, to come to games as far as possible and to continue giving their ovations to them until the end of the games.

P032 Behavioral Sciences

THE COMPARISON OF EXPECTATIONS AND SOCIO-CULTURAL CHARACTERISTICS OF HORSE RACE SPECTATORS

* Cengiz Karagözoğlu, Gökhan Çetinkaya

* Marmara University, School of Physical Education and Sports

This research has been aimed to find out horse racing spectator's expectations related to several variables. Research model was survey and a previously developed questionnaire was used. All questionnaires applied by researchers one by one. 85 out of totally valid 2337 questionnaires excluded from evaluation for several reasons. Samples were Adana (N=110), Bursa (N=246), İzmir (N=148) and Istanbul (N=1833). Gender distribution was male 95,9% and female 4,1% and most of population were single (52,2%), 55,5% were married and 3,1% divorced. Statistical evaluation is conducted with frequency distributions and chi-square test. According to the results, one of the common finding was nearly a half of horse racing fans were related to several kinds of gambling and they tend to gain money with horse racing games as gambling. 1/3 of spectators interests with turf for just gain money. As a result that depend on expectations, just 10 in a percent of horse racing fans thinking about they made a profit from horse racing games. Fans who are perceiving that they made a profit, they are playing less lottery games comparing to made no profit ones (chi-square =8,36; $p < .05$).

P033 Behavioral Sciences

THE EFFECT OF SOCIAL STRESS ON PERFORMANCE LEVEL OF ATHLETES IN EGYPTIAN NATIONAL TEAM OF GYMNASTIC

Mohamed Abd el Menaem El Shafaey, Moustafa Hussein Bahy
Minia University

Stress occur generally as a result of an individual or a group of individuals concentration on factors beyond control, which make the individual unable to cope psychologically with society around him.

The concept of stress indicates that it is an intrinsic or external change leading to a sharp constant emotional response. This research aims at recognizing the effect of social stress on

performance level of international gymnastic athletes and studying the difference between the results of apparatus and the relation between social stress and performance level on various apparatus.

The researchers used the descriptive method [field survey]. the community of the research consists of members of egyptian national team of gymnastic on May 2004 championship. They were [11] athletes. The researchers used test of social stress.

Research results were as follows:

1. Social stress have an effect on the performance level of athletes at egyptian national team of gymnastic.
2. There are difference between social stress and preformance level on various apparatus.

P034 Behavioral Sciences

FACTORS WHICH ARE AFFECTING THE PARTICIPATION OF MUĞLA UNIVERSITY STUDENTS IN LEISURE TIME ACTIVITIES

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The purpose of this study is to examine the leisure preferences of the students of Muğla University.

The data was collected by using the test at 680 students whom are the student at different Faculties and High Schools of Muğla University. The Data were analyzed by using the Excell 7:0 which was developed by Microsoft packed company and SPSS 7,5 statistic analyzing programmed by Frequency technique.

According to results, leisure preferences of the students are being effected by the economic, presentation, leisure program, leadership and the facilities factors.

P035 Behavioral Sciences

INVESTIGATION OF STATE ANXIETY LEVEL OF GREASED WRESTLER

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The aim of this study was to describe state anxiety levels of greased wrestler and investigate effects of state anxiety level on greased wrestling performance.

In this study 100 greased wrestlers participated voluntarily. The athlete's ages were changed between 15 and 41(25.88±6.53 years). This research was carried out at 650th historical Elmalı Yeşilyayla and 2nd World Competition in Elmalı/Antalya.

Demographic information form is used for describe general characteristics of athletes and state anxiety subscale of Spielberger's trait and state anxiety inventory is used for describe state anxiety levels.

At the end of the analyses according to competition category, there were no significant differences state anxiety level between categories (1st level: 31.81±8.83, 2nd level: 28.62±4.81, 3rd level: 33.00±6.45, 4th level: 32.27±6.16, 5th level: 31.38±7.54, and 6th level: 31.89±6.51) ($p > 0.05$). According to competition result, state anxiety level of successful athletes and unsuccessful athletes were 30.69±8.20 and 32.37±5.14, respectively. And there was significant difference between groups. At the end of the competition it was seen that successful athletes had less anxiety point than the unsuccessful athletes ($p < 0.05$).

When evaluated state anxiety level there was no significant difference between group who were derive their income from wrestling and group who were not ($p>0.05$). When compared state anxiety level, there was no significant difference between group which found their preparations enough (31.34 ± 6.66) and group which not found (31.84 ± 7.04) ($p>0.05$).

In conclusion, it was found that state anxiety levels of greased wrestling athletes were less and state anxiety levels of athletes which are successful at the end of the competition were significant less than the other. When state anxiety level considered, there was no significant difference between the athletes who were derive their income only from wrestling and the athletes who were not.

P036 Behavioral Sciences

CHEERLEADERS' SOCIO-CULTURAL BACKGROUND AND THEIR INFLUENCES ON THE FOOTBALL SPECTATORS IN TURKEY

* Mehmet Acet, Veysel Küçük

Compared to the other sports, football is the most favourite sport in view of the spectator capacity and the number of viewers. Owing to the violence among the spectators in the stands, the examination of spectators and cheerleaders has become a current issue.

As a result, our research has been intensified on cheerleaders' socio-cultural background and their influences on spectators.

85 cheerleaders from 12 teams made up of super league, the 2nd and 3rd league have been examined.

All the test subjects are male. 80% of them are single. 44% of them are high school graduates, 24% of them university graduates, 13% of them are secondary school graduates. The majority of them are artisans. 33% of them like pop music, 31% of them like arabesk music. We determined that 34.1% of them read regularly and 49.4% of them prefer adventurous movies and the referee's influence on them is 60%.

P037 Behavioral Sciences

KNOWLEDGE AND ATTITUDES OF WRESTLERS REGARDING MENTAL TRAINING

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The study aimed to evaluate the level of knowledge of wrestlers regarding psychological, mental and visual training. Also the frequency of application of this knowledge was determined.

We applied a specially designed questionnaire to 101 wrestlers of the Turkish National Young Male Wrestling Team and İstanbul local wrestling league to assess their knowledge regarding psychological mental and visual training. Reliability and validity of the questionnaire was performed by researchers.

A total 101 male wrestler these average education level was high school were used as subject in this study. The findings of this study showed that many of the athletes were not average of mental training. % 50 of the wrestler believe that mental training should taken place in every training session.

It was established that wrestler had not knowledge about the techniques of psychological training. With increasing age and duration of wrestling the frequency of application of psychological training was increasing. It was found that mental and visual training should be instituted earlier and widely.

P038

Behavioral Sciences

THE LEADERSHIP BEHAVIOR AND ITS RELATION TO JOB SATISFACTION AMONG UNIVERSITY YOUTH – CARE OFFICIALS

* Mohmed Fawzy

* *Faculty of Physical Education Egypt*

The success of any institution depends on the effective use of management to meet emerging problems and achieve existing objectives by the leader and group. The leader will be able to take the right decisions, suitable for the present and the future. Therefore, he makes use of available opportunities to achieve the greatest potential profits, and, at the same time, be ready for the future. Each educational institution has specific main which allow for establishing main principles to manage such institution by defining objectives, planning work and organizing. This is reflected on the work done by everybody or group. This points out the significance of leadership to achieve co-operation and in target individual efforts as well as group efforts so as to achieve objectives.

Recently, many researchers – due to the significant role played by leadership in achieving social advanced aims and affecting individual behavior – have become involved in studying it and developing its strategies.

This is probably because of its strong influence on individual motivation, attitudes and satisfaction with their work. The leader, in his work relies on officials working with him using rewards, reinforcement, or any other means to make officials interested in responding to the leader as the main source of rewards. Thus, the leader's role has a major part in affecting officials' satisfaction with their work.

Leadership plays a major role in productive and service activity through affecting officials' attitudes, behavior and integration with aims in the organization.

The nature of Leadership determines the work environment features, at least, psychologically. In such environment, officials spend most of their time work, but their satisfaction with their whole life.

The Leadership behavior refers to achieving co-operation and integrating individual and group efforts in order to achieve objective. Besides, Job satisfaction is a concept - usually involves happiness attained by work - which refers to that set of occupational emotions or psychological state felt by the individual toward his work.

From what is mentioned obvious that the leadership behavior is significant in achieving occupational satisfaction among officials in different fields such as the physical one.

P039

Behavioral Sciences

CHAMPION PHYSICIANS

* Ahmet Doğan Ataman

Objective: If we look to the history of medicinal sports, there are many kinds of physicians in the World Championships and Olympics. In this poster the aim is to represent eleven of them by the help of philately.

Methods: Searching the lives of these physicians by the medical literature and finding the stamps and cancellations related to them.

Results: After learning their lives, it is obvious that some physicians were very successful in different kinds of sport facilities. Therefore some stamps and cancellations were published due to their names by several countries.

As the sport facilities can be considered like a major health activity; some physicians in history, who are the pioneers of health, became champions in various sports.

Conclusion: I have showed in my poster about the gold medal winner physicians in Olympiads and in the World Championships and their works for sport.

P040 Behavioral Sciences

THE FACTORS AFFECTING TURKISH ELITE MEN AND WOMEN VOLLEYBALL PLAYERS' STARTING SPORTS AND THEIR EXPECTATIONS

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The aim of this study is to realize the reasons and expectations of volleyball, which has become an elite sport for women and men in Turkey.

The data in this study was collected by a questionnaire. The reliability coefficient of the questionnaire which is been constructed by the guidance of experts is calculated is alpha .80. The population of the study consists of 2000 sportmen who are playing in 11 different provinces.

The analysis of the data was conducted through frequencies and percentages. In order to review the difference among the sportmen's opinions according to sex, educational background and league status, one way ANOVA was conducted. In case the difference was significant, Fischer's test ANOVA technique was used,

The result of research revealed that physical education department and family had great effect for sportmen to start playing volleyball, where as TV – press had little effect on dealing with this sport.

Besides the reason for dealing with volleyball in Turkey were indicated to be attracted by this sport and the pleasure of being successful. On the other hand, the expectations of volleyball players were indicated to be healthy, maintain their health and make their living as successful sportmen.

P041 Behavioral Sciences

THE EFFECT OF SPORT ATTAINMENT LEVEL IN TRAIT ANXIETY

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The aim of this study was investigate the effect of sport attainment level in trait anxiety. Participants were 154 male students with mean age of $21,97 \pm 1,88$ years, who are attended in Akdeniz University School of Physical Education and Sport and joined this research voluntarily.

Sport Attainment Level Questionnaire and Trait Anxiety Inventory of Spilberger's Trait Anxiety Scale were applied to the all subjects joined this research.

It was found that sport attainment level of all subjects was $33,116 \pm 10,146$, of high sport attainment group was $41,91 \pm 6,018$ and of low sport attainment group was $24,23 \pm 5,773$. Trait anxiety scale mean of whole group was $39,58 \pm 6,63$.

According to statistical analyses, there was no difference in trait anxiety between age groups. When examining the trait anxiety level of high and low sport attainment group there was a significant difference between high and low sport attainment group ($p < 0,05$).

According to this finding, it is thought that there is an association between sport attainment level and trait anxiety. Higher sport attainment level will be positively effect trait anxiety to be lower. Therefore, it is said that elite sports are parameter which positively effects trait anxiety level. But individuals whose trait anxiety level is low may be directed towards elite sports, so this probability should be taken into consideration.

P042 Behavioral Sciences

THE STUDY OF FACTORS EFFECTING DOING SPORTS OF WORKING AND NONWORKING WOMEN AGED BETWEEN 20-40

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The purpose of this research was to create a modern society related to the importance of women's sports activities in health, social and cultural fields. It was researched on non-working and working women at private or public institutions and organizations.

The research samples represented in total 318 women between the ages of 20 and 40, 122 of whom work and 196 who are housewives.

The data which was used in this research, consisted of 34 questions in the form of a questionnaire. The questionnaire was arranged through the expectations of women according to their marital status, whether they work or not, whether they do sport or not.

Statistical processes on the data of the research were carried out by using the SPSS (11.0 data) packet program. The X² (Chi-Square) statistics technique was applied to bring out the difference among the frequency dispersion in the groups and find out if they are important or not. The error numerator level in this research was taken as $p < 0.05$.

According to the finding of the research, it was found that 28% of the women did sport, 36.8% of women sometimes did sport and finally 35.2% of women didn't do sport. Of the women who participated in this research, 38.4% of them worked and 61.6% of them didn't work. It was found that 11.3% of the working women do sport and 10.4% do not. By analysing this proportion, we can see that women who work do more sport than who do not work.

According to the research findings, it has been seen that the factors effecting women's sport life have great dimensions. Some of these factors had been found as the following. For example, working and non-working positions, education levels and their jobs, their parents and husband's education levels, their salaries, family structure, the family's interest in sport, the position of the sport places, the suitable social environment, the effects of the

environment and the close-friends, their weight, time fact and the interest and willing in this topic. Women's duties and responsibilities also take great place on doing sport.

It must be supplied that by rendering them about sport and creating more sport places, they can be pulled inside sport more easily and efficiently.

P043

Behavioral Sciences

THE APPROACHING TO DOPING OF WRESTLERS AND FACTORS AFFECTING OF DOPING IN WRESTLER

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The purpose of the study was to determine approaching to doping of wrestlers and factors affecting of doping in wrestler.

For that reason, Greco-Roman wrestler and free style wrestler (N=99), wrestling the league of 1st and 2nd Wrestling, ae participated as a subject in our research. Some of the wrestler (N=84) has experienced in Türkiye National Wrestling team at any time. Survey method, a questionnaire including two parts factors affecting of doping and approaching to doping of wrestlers, was used in the research. The questionnaire was asked wrestlers, some of them doped in the past, some of them though doping in the past, some of them haven't doped. All gathered data were analyzed by the SPSS for Windows, frequency analysis, crosstabs and chi-square were used to statistical analysis for researching relationship what they think about doping.

At the end of research, wrestlers were used to dope for close relative of psychological pressure and their expectation. But inspite of that, most of them want doping to be banned.

P044

Behavioral Sciences

A SCALE DEVELOPING STUDY ON THE LEVEL OF INFLUENCE OF SUPPORTER BOOING ON THE PLAYER (SLISBP)

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The performance of players are influenced by a number of factors in and/or out of competition. Firstly, these factors affect the mood of the players, which is the mediator variable. And this variable affects the performance of the player. There are a lot of studies on the mood and the performance of the player, and spectators. Nevertheless, no study exist in sports psychology on how the behaviors of the supporters affect the performance of the players and what kind of behaviors these are. In this study, a scale has been developed on to what extent the booing by the spectators affect the players (SLISBP). SLISBP has been planned as 5-Likert type scale and two forms. Items written for this reason have been investigated by various experters, and SLISBP have been decreased to 32 items in the first step. A 32 item- SLISBP has been applied on 241 players, who are amateurs and professionals playing soccer and basketball, and the wrongly responded 4 sheets have been omitted. Both home and visitor supporters data have been analyzed with item-total correlation and factor

analytical techniques together. SLISBP has been decreased to 17 items for both home and visitor's forms taking the item-total correlation and factor analyses into consideration. It has been found that item-total correlations range 0.441-0.646 and factor loadings range 0.498-0.702 for home's form; and they are 0.457-0.696 and 0.508-0.758 for visitor's form, respectively. Although there are three factors on each form, only one of these factors is dominant. The first factor explains 39.32% of variance for home's form, 40.44% of variance for visitor's form. Cronbach Alpha internal consistency coefficient is 0.902 for home's form, and is 0.905 for visitor's form. It has been found that the level of influence of supporter boo on the player increases as the sport age decreases ($r=-0.222$; $p<0.01$); at this same time, in comparison to males, female players have been found out to be affected more by the visitor's booing. Moreover, the relation between SLISBP and The State Trait Anger Scale (STAS) has been investigated for validity. The results have shown that the home and visitor's scores of players increase as the scores of trait anger and covert anger increase. Although it isn't significant, the correlation between anger control and forms is negative. As a result, SLISBP can be accepted as a reliable and valid scale.

P045

Behavioral Sciences

COMPARISON OF TRAIT ANXIETY LEVEL IN FEMALE AND MALE ATHLETES

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The aim of this study was compare trait anxiety level of male and female athletes.

Hundred University students (50 male, 50 female) from Akdeniz University School of Physical Education and Sport, who had past sport experiences, between the ages of 17-27(21,77±2,08 years) voluntarily joined our study. Trait Anxiety Inventory of Spilberger's Trait Anxiety Scale were applied to the all subjects joined this research.

It was determined that there were no differences Spilberger's Trait Anxiety Scale between male and female(Female:0,96±0,95; Male:1,22±1,30) ($z=-0,66$).

According to these findings, Trait Anxiety which affects sport performance was not significant a difference among male and female athletes.

P046

Behavioral Sciences

A COMPARISON OF EATING ATTITUDES AND PHYSICAL ACTIVITY LEVELS OF UNIVERSITY STUDENTS WITH REGARD TO SOCIAL PHYSIQUE ANXIETY

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Objective: The aim of this study was to compare the eating attitudes and physical activity level of female and male university students with regard to social physique anxiety level.

Methods: 253 female (M age = 22.15 ± 2.75) and 229 male (M age = 23.20 ± 2.29) university students were voluntarily participated. "Eating Attitude Test (EAT-40)", "Social Physique Anxiety Scale" and "Physical Activity Assessment Questionnaire" were used to assess

the eating attitude, social physique anxiety and physical activity level of participants, respectively. Female and male participants in this study were assigned to high (HSPA) and low (LSPA) social physique anxiety groups with respect to their median scores. The median social physique anxiety scores were 31 and 28 for females and males, respectively.

Results: 2 x 2 (Females/Males x High/Low Social Physique Anxiety Groups) Analysis of Variance revealed significant gender differences in eating attitudes ($F(1,457) = 12.09; p < .01$) and physical activity level ($F(1,383) = 5.24; p < .05$) between males and females. Males have favorable eating attitudes and high physical activity level than females. In addition, significant differences were obtained in eating attitudes ($F(1,457) = 29.14; p < .01$) and physical activity level ($F(1,383) = 6.16; p < .01$) between participants in high social physique anxiety group and those in the low social physique anxiety group. Participants in the HSPA group have unfavorable eating attitudes and have higher physical activity MET values than participants in the LSPA group. On the other hand, group x gender interaction was only significant for the eating attitudes scores ($F(1,457) = 14.75; p < .01$) but not physical activity level ($F(1,383) = 0.02; p > .01$). Females in the HSPA group scored higher on the EAT-40 than males in HSPA and females and males in the LSPA groups.

Conclusion: The social physique anxiety, which is important aspect of self-presentational process, may have an influence on eating attitudes and physical activity level of individuals.

P047

Behavioral Sciences

ANALYSIS OF PHYSICAL AND NON-PHYSICAL ASSAULTS TOWARDS BASKETBALL REFEREES ACCORDING THEIR GENDER DIFFERENCES IN TURKEY

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Analysis of Physical and Non-Physical Assaults Towards Basketball Referees According their Gender Differences in Turkey

The purpose of this study is to find out the demographic qualities of the male and female basketball referees and analyse the aggression situation they face in Turkey. Total 1193 surveys were sent and 461 surveys were returned. The research has been carried out on 461 basketball referees who respond the survey.

Survey technique is used to gather the necessary data. There are 25 questions in total which 15 of them aims to define aggressiveness of the situation and 10 of them to identify the demographic qualities. The information was analyzed using percentage, frequency, crosstabs and arithmetic mean statistical methods.

According to the research findings:

The basketball referees who contributed to the research, 90 (19.52%) were female, and 371 (80.48%) were male. The age group of 22-26 years had the highest response rate with 51.6%.

Strikingly, 41.3% of respondent referees had been assaulted in one way or another. Among them, 6.94% were female and 34.7% were male.

Besides, 31.4% of these assaults were verbal, and 2.6% were physical. 7.3% of the cases involved both verbal and physical assaults. Only one female referee and 45 (9.76%) male referees had been assaulted physically. 192 (41.3%) referees reported that they had been assaulted verbally and physically at least once while officiating.

Players and coaches together were top on the list with 54.4% in terms of assaulting the referees. 53.2% of female referee were assaulted by coaches and 43.8 of them were assaulted by players.

Spectators are assault on female referees with 40.6% percentage and managers were 9.4%. 56.5% of male referees assaulted by players, 49.7% of male referees assaulted by spectators, 54.6% of male referees assaulted by coaches and 21.1% male referees assaulted by manager. The reason of assault with highest ration "loosing ambition and get upset" by 58.0%. 81.3% of assault were accured "during the game". Most of assault accured in Ankara (the capital city of Turkey) by 4.3% percentage.

The majority of referees (46%) reported that their assaultant was not punished in any way. Temporary suspension was the most common consequence the federation discipline committee has given to the assaultants. A few fine (\$250 -\$500) punishment had been seen in research of Turkish Bas. Fed. Discipline Com. reports.

P048

Behavioral Sciences

MOTIVATIONAL ORIENTATION OF PROFESSIONAL AND AMATUER SOCCER PLAYERS

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Objective: The purpose of this study was to compare the motivational orientation of professional soccer players with amateur soccer player.

Methods: 74 amateur (Mage = 21.54 ± 4.38) and 86 professional (Mage = 24.21 ± 3.75) soccer players were voluntarily participated in this study. "The Sport Motivation Scale" (SMS, Pelletier et al., 1995) was used to assess the motivational orientation of soccer players. SMS is designed to assess three types of intrinsic motivation, three forms of extrinsic motivation and amotivation.

Results: Independent t-test used to test the differences in the motivational orientation between amateur and professional soccer players. Independent t-test revealed significant differences in the introjection scale of extrinsic motivation between amateur and professional soccer players ($t = 2.25; p < .05$). Amateur players had higher introjection scores compared to professional soccer players. There were no significant differences in know/ accomplishment ($t = 1.53; p > .05$), experience stimulation ($t = 1.81; p > .05$) subscales of intrinsic motivation, external regulation ($t = 1.34; p > .05$), identification ($t = -0.11; p > .05$) subscales of extrinsic motivation and amotivation ($t = 1.88; p > .05$) between amateur and professional soccer players. In addition, amateur and professional soccer players did not differ on intrinsic ($t = 1.78; p > .05$) and extrinsic ($t = 1.33; p > .05$) motivation.

Conclusion: It can be concluded that level of sport involvement may have no influence on the motivational orientation of soccer players.

P049

Behavioral Sciences

BODY RELATED PERCEPTION OF EXERCISERS AND NON-EXERCISERS

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Objective: The purpose of this study was to compare the perception of body related construct of regular exerciser university students with non-exercisers and also to investigate the gender differences in body related perception.

Methods: 20 female (Mage = 21.05 ± 1.39), 20 male (Mage = 23.5 ± 2.37) regular exerciser and 14 female (Mage = 21 ± 1.11) and 17 male (Mage = 21.53 ± 2.03) non-exerciser university students were voluntarily participated in this study. Social physique anxiety, body image satisfaction and the perceived body attractiveness were assessed as the perception of body related constructs. "Social Physique Anxiety Scale (SPAS, Hart, Leary, & Rejeski, 1989)", "Berscheid, Walster and Bohrnstedt Body Image Questionnaire (Berscheid, Walster, & Bohrnstedt, 1973) and Body Attractiveness subscale of Physical Self-Perception Profile (Fox & Corbin, 1989)" were used to assess social physique anxiety, body image satisfaction and the perceived body attractiveness, respectively. Data were analyzed by using 2 x 2 (Male/Female x Exercisers/Non-Exercisers) Analysis of Variance.

Results: Analysis indicated no significant differences in body image satisfaction ($F(1,70) = 2.75; p > .05$), the perceived body attractiveness ($F(1,68) = 0.66; p > .05$), total social physique anxiety score ($F(1,66) = 0.40; p > .05$), the expectation of negative evaluation of one's physique by others ($F(1,67) = 0.01; p > .05$) and feeling of discomfort about one physique ($F(1,69) = 1.39; p > .05$) subscales of SPA between exercisers and non-exercisers. 2 x 2 ANOVA revealed significant gender differences in body image satisfaction ($F(1,70) = 7.51; p < .01$) between male and female in favor of males. On the other hand, no significant gender differences were obtained for other body related constructs ($p > .05$). In addition, gender x group interaction was not significant for perception of all body related constructs ($p > .05$).

Conclusion: It may be concluded that gender and participating in regular exercisers have no influence on the perception of body related constructs.

P050 Behavioral Sciences

STEP DANCE, BODY IMAGE SATISFACTION AND PHYSICAL SELF-PERCEPTION

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Objectives: The purpose of this study was to investigate the effect of 10-week step dance program on the body image satisfaction and physical self-perception.

Methods: 8 female (Mage = 21.29 ± 0.95) and 14 male (Mage = 22.07 ± 1.50), a total of 22 university students were voluntarily participated in this study. 8 female and 14 male university students were randomly assigned to experimental and control groups by equating gender. 11 university students in the experimental group participated in a step dance sessions of 50 min. per day, 3 days per week for 10 weeks with 60-80 % of their heart rate reserves. Through 10 week period, control group did not participate in any regular physical activity, "Berscheid, Walster and Bohrnstedt Body Image Questionnaire (Berscheid, Walster, & Bohrnstedt, 1973)" and "Physical Self-Perception Profile (Fox, & Corbin, 1989)" were administered to both two groups by the researcher one day before and one day after 10 week exercise program. Data were analyzed by using 2 x 2 (Experimental/Control Group x Pre/Post test) repeated measure analysis of covariance (sex as a covariate).

Results: Analysis indicated that no significant time and group main effects on the body image satisfaction and five subscales of physical self-perception ($p > .05$). In addition, group x time interactions were not significant for both body image satisfaction and physical self-perception ($p > .05$).

Conclusion: By considering the limitation of small and unrepresentative sample of university students, it can be concluded that step dance does not have an influence on the body image and physical self-perception.

P051 Behavioral Sciences

COMPARISON OF ANXIETY LEVELS PRE-COMPETITIVE AND POST-COMPETITIVE PERFORMANCE

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Objective: The purpose of the study is to identify what kind of changes a sports science students experience before and after the competitive motor task in competitive anxiety and its components.

Methods: 40 athletes (20 men, 20 women) having age average of 22.95 ± 1.25 participate in this study. Before and after the competition sports science students are administered The Competitive State Anxiety Inventory (CSAI-2) and after the competition athletes are administered The Trait-State Anxiety Inventory. Two types of performance measures were employed: (1) number of errors during the performance and (2) the time it took to complete the motor task. Collected data were analyzed using descriptive statistical, Pearson Product Correlation Coefficient and Multivariate Variance Analysis (MANOVA).

Results: There were positively significant relationships between pre and post Cognitive Anxiety ($r(40) = 0.932; p < 0.05$). There were positively significant relationships between pre and post Somatic Anxiety ($r(40) = 0.885; p < 0.05$). There were positively significant relationships between pre and post Self Confidence levels ($r(40) = 0.866; p < 0.05$). After the competitive task, there were positively significant relationships between only group of low times and Cognitive Anxiety ($r(20) = 0.586; p < 0.05$). Before the competitive task, there were negatively significant relationships between group of high error and Cognitive Anxiety ($r(23) = -0.423; p < 0.05$). There were positively significant relationships between group of low times and Cognitive Anxiety ($r(20) = 0.496; p < 0.05$). According to t test results, except state anxiety after competition ($F(1,38) = 1.074; p > 0.05$), there were a significant differences in all anxiety dimensions (cognitive anxiety before competition, somatic anxiety before competition, self-confidence before competition, cognitive anxiety after competition, somatic anxiety after competition, self-confidence after competition and trait anxiety after competition) between female and male students ($p < 0.05$).

Conclusion: Results show that, state anxiety measured with CSAI-2 and anxiety components changes after and before the competition task.

P052 Behavioral Sciences

EFFECTS OF ONE WEEK CAMP ON ANXIETY FOR YOUNG AND ELDER NATIONAL WOMEN HANDBALL PLAYERS

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Purpose: The purpose of this study was investigate the effect of one week camp on anxiety on youth and A national women handball team.

Material & Methods: The national team consist of 17 women whose ages were approximately 24±5, 35 year and 18 young women whose ages were approximately 17,44±0,98 year. Data were gathered in national team camp's first day and last day. To measure anxiety, Competitive State Anxiety Inventory (CSAI-2) and State Trait Anxiety Inventory (STAI) were used. Descriptive statistic techniques and Mann-Whitney U and Wilcoxon were used for statistical analysis. Significance was set at the p<0,05 level. Data was analyzed by SPSS for Windows.

Results: Mann-Whitney U test indicated that there is a significant difference in youth and A team players' cognitive anxiety between pre-test and post-test (p<0,05). Wilcoxon test indicated that there is a significant difference in youth players' state anxiety and cognitive anxiety between pre-test and post-test and in A team players' state anxiety and self confidence between pre-test and post-test (p<0,05).

Conclusions: The result of the statistical analysis, it could found that only state anxiety was affected by the national team camp. The result has occurred that way because of second data were collected before the competition which was between young national team and women national team.

P053

Coaching

A PRE STUDY: COMPOSING THE SWIMMING NORMS IN TRNC

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The purpose of this study which is about swimmers is to determine the antropometric measurements and the physical fitness factors of the 10-14 year old male and female competitive swimmers in T.R.N.C. For this reason, a group consisting of the best swimmers in our country was formed. In this group, there are 10-14 year old 23 female and 20 male swimmers who train at least three times a week and have been competitive swimmers for years.

Between the dates of 16/12/2003 and 21/12/2003 this study was conducted in the Health and Wellness lab of the Near East University and the Sports Hall of the Near East University Junior College. The swimmers were tested to determine their body height, weight, sit and reach test, standing forward flexibility, back flexibility, right hand grip, left hand grip, leg strength, back strength, squat vertical jump, active vertical jump and 20 m shuttle run. Femur and humerus widths, wrist, waist, calf and flexed arm girths of swimmers, subscapular, calf, suprailliac, triceps, abdominal and biceps skinfolds of the swimmers are measured and recorded to determine the body fat percentages and somatotypes.

The Descriptive Statistics and Pearson Correlation Coefficient of SPSS Programme were utilized to analyse the data. The mean and standard deviation of these results are; the body height of the male swimmers is 148.8 + 9.2 cm, the body height of female swimmers is 151,7+7,7 cm, the body weight of the male swimmers is 43.6+8.5 kg, the body weight of the female swimmers is 45,07+6.9 kg, and the body fat percentage of the male swimmers is 13,7 + 4,1.and of the female swimmers is 21,8 + 3,1.

The somatotypes of the male swimmers are 2,8-4,2-2,6 (Endomorphic mesomorph) and of the female swimmers are 3,09-3,6-2,8 (Central).

There is a meaningful relationship between the physical performance and the body composition of 10-14 year old Turkish Cypriot competitive swimmers.

The strength test results and the vertical jump test results are correlated. The three flexibility tests are correlated with one another. The strength tests as well have meaningful relationships. The negative relationship is found between the percentage of fat and 20m shuttle run test and the active vertical jump test results and the 20m shuttle run test results are correlated.

P054

Coaching

THE EFFECTS OF TWO DIFFERENT INTERVAL TRAINING PROGRAMS ON AEROBIC AND ANAEROBIC PERFORMANCE OF 13-14 YEARS OLD MALE STUDENTS

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The purpose of this study was to determine the effects of two different intervals training programs (intensive interval 8x400m and extensive 4x800m 2 days a week for 8 weeks) on 13-14 years old males in aerobic and anaerobic performance development.

The subjects were thirty four secondary school students who volunteered to participate in the study. At the beginning of the study, subjects were randomly divided into intensive interval and extensive interval groups, The descriptive statistics of the intensive interval and extensive interval groups are as follows 0.05 years old b) heights,±0.05 years old, 13.52±respectively; a) ages, 13.58 159.00±0.07cm, 154.94±0.07cm c) weights, 49.05±4.69kg, 46.47± 3.85kg

The variables of the subjects' age, height, weight, heart rate, systolic blood pressure, diastolic blood pressure, aerobic performance and anaerobic performance were included in this study as variables. Randomized subjects, pretest-post test two group research design were used in the study.

Pretest and post test results were calculated before and after training period. Training program for intensive interval group included, 8x400m. run with 85-90 % of max. HR with 1/2 rest interval ratio. Training program for extensive interval group included 4x800m run with 70-80 % max. HR with 1/1 rest interval ratio. All of the subjects passively rested during their rest interval. The statistical analyses of the study included descriptive, Wilcoxon and Mann Whitney U statistics.

The results of the study showed that VO2 max. values were statistically significant between two groups (p<.05). In other words, extensive interval training program are more effective than intensive interval training program in terms of developing aerobic performance.

The results were further discussed and alobrated.

P055

Coaching

COMPARISON OF UPPER BODY STRENGTH IN DIVISION II COLLEGE OFFENSIVE AND DEFENSIVE FOOTBALL PLAYERS IN THE UNITED STATES

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Coaches should be able to design workouts that cover all related fitness areas - strength, flexibility, agility, aerobic

and anaerobic endurance and speed. The One Repetition Maximum (1RM) is the most popular way to assess dynamic strength and most used field test for evaluating muscular strength (Bryzcki, 1993). The purpose of this study was to compare college offensive and defensive football players' upper body strength. Specifically, to compare upper body strength of college football offensive linemen and defensive linemen and to compare upper body strength of the offensive backs, receivers and defensive backs across One Repetition Maximum (1RM) test. Forty-one Division II National Collegiate Athletic Association (NCAA) college football players participated in the present study. The one-repetition maximum (1RM) was used to measure participants' upper body strength. This test requires the individual to lift the heaviest resistance possible one time through a full range of motion (Mayhew, Ware, Clemens, & Coco, 2001). The participants' upper body strength scores were expressed relative to body weight. One-way analyses of variance (ANOVA) were conducted to test the differences in upper body strength among offensive and defensive college football players and their player positions (offensive linemen versus defensive linemen as a group and offensive backs and receivers versus defensive backs as another group) by using their relative strength. The results of one-way ANOVA revealed that there was a significant difference between defensive players and offensive players in their upper body strength scores ($F = 6.96, p = .01$). The upper body strength scores of defensive linemen were also significantly higher than those of offensive linemen ($F = 6.05, p = .03$). Offensive backs and receivers did not significantly differ from defensive backs in their upper body strength scores ($F = 1.09, p = .31$). These results show that a football player with a smaller body type can have a stronger upper body than a larger football player when upper body strength scores are expressed relative to body weight, although the larger football player can lift the heavier weight in a bench press. This relationship can be helpful to coaches in making decisions on player positions and developing training programs to meet the needs of individual players.

P056**Coaching****THE EFFECTS OF THE STRETCH TIME ON IMPROVING OF FLEXIBILITY**

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* Atatürk University

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The purpose of this study is to determine the effects of different stretch duration on flexibility. Subjects were forty-four (n=44) female elementary students, ages 8-9. Subjects were randomly divided into 3 groups. Subjects completed sit and reach test as pre-test variable. Experimental group 1 (n=14) applied 10 to second static stretch protocol, five times a week, during six weeks. Experimental group 2 (n=15) performed 20 second static stretch 5 times during six weeks. Control group didn't perform any stretching exercise at all. Six weeks later post-test measures were taken. Nonparametric tests which were Wilcoxon Signed Ranks Test, Mann-Whitney U, Kruskal-Wallis H, Univariate Variance Analysis were used. Alpha was set at 0.05. Results revealed that 10 second and 20 second stretching duration improved flexibility ($p < 0.05$). There were no significant differences between two groups in terms of improving flexibility ($p > 0.05$).

P057**Coaching****THE COMPARISON OF THE DEVELOPED TRAINING METHODS IN WRESTLE ON ANAEROBIC SITUATION WITH THE CONDITIONS ON THE TOURNAMENT**

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In our study, the objective is to develop an exercise method for the higher level wrestlers considering competition rules and physiological basis.

Totally 12 wrestlers have joined into our research, having their age of 22.6 ± 2.6 , their height of 173.7 ± 10.7 kg and their sporting age of 12.6 ± 2.6 year from free and Greco-roman national wrestling teams as well as from İstanbul Demirspor wrestling team.

The research has been developed in two stages. In the first stage; the prepared test protocol applied to the wrestlers and measured the amount of lactic acid. In the second stage a competition has been made between wrestlers and then measured the amount of lactic acid and also the results have been compared with that of the first stage.

In the measurements it has been used a lactate analyser named as "Accutrend Lactate" by the Roche company. All the statistical analysis are performed in accordance with SPSS 10.0, paired sample t-test and as well as correlation analysis.

According to the results obtained, it has been reached to an opinion that the application of the exercise method developed for the increasing of competition performance and for a conscious preparation on targeted orientation, is effecting positively on performance.

P058**Coaching****TACTICAL ANALYSIS OF GREEK NATIONAL TEAM, UEFA 2004 CHAMPION OF EUROPE FOOTBALL CHAMPIONSHIP**

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The aim of this study was to research tactics of Greek National football team. Characteristic of six matches were defined and determined parameter for analyzing to Greek National football team at UEFA 2004 European Football Championship. Television, video recorder and Soccerstat 2000 were used for analysing.

All gathered data were analyzed by the SPSS for Windows, frequency analysis and percentage ratio were made.

As a result of the research, percentage of the success of a football team is increasing if the football team is committed to the tactical adaptation and match systematic. If Greek football team is away from the tactics and game system, their success decreases.

P059**Coaching****THE LEVELS OF SPEED AND RECOVERY FOR MALE HANDBALL PLAYERS IN DIFFERENT CATEGORIES**

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¹ Atatürk University

Purpose: The aim of this study is to determine the recovery levels of male handball players.

Material and Method: In various age groups 16 from Bafra Belediye and Bafra Lisesi 17 male handball players have been chosen as a subject in the study. Consecutive 10 repeated 20 m sprint test for 15 seconds sprint have been applied. Using of t-test has done statistical analyses of data obtained from subjects chosen for the study.

Results and Discussion: Results of this study showed the following mean values for Bafra Belediye handball players; 23.69±4.48 years old, height are 184.31±3.95 cm, body weight 81.94 ±4.36 kg, vertical jump 67,63 ±7,08 cm, anaerobic power 122,27±14,07 kg m/sn; whereas Bafra Lisesi handball players have mean values, 14,71±0,78 years, height are 178,35±8,1 cm, body weight 72,29 ±85,70 kg, vertical jump 64,70 ±7,46 cm, anaerobic power 116,49±16,58 kg m/sn.

The mean values of first two sprints for the two teams have been obtained as 2,74 seconds for Bafra Belediye and 3.07 seconds for Bafra Lisesi; The mean of values of the last two sprints are 3,21 seconds for Bafra Belediye and 3,48 seconds for Bafra Lisesi.

The difference of the mean values between the two teams has been accepted as 0.46 second for Bafra Belediyesi and 0.41 second Bafra Lisesi as a recovery level. There haven't been any significant differences between the parameters of the subjects due to their age, height and body weight and after 1 to 3 minutes p<0.001 recovery level and vertical jump anaerobic power and in the 15 seconds of recovery.

Conclusion: In conclusion 10 consecutive 20 meters sprints with 15 seconds jogging in handball can be useful as a training of speed and anaerobic power.

P060**Coaching****AGILITY DEVELOPMENT WITH SPECIAL TRAINING PROGRAMS IN 12 YEARS OLD SOCCER PLAYERS**

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*Ali Kızılet

* Marmara Üniversitesi, Beden Eğitimi ve Spor Yüksekokulu

The purpose of this study was to observe agility development with special training programs in 12 years old soccer players. This research is included in two groups, experimental(N=10) and control(N=10) group which are composed of soccer players at the soccer club of İstanbul/Pendik sport. The subjects of experimental group participated in 2 training sessions per week for 8 weeks using special training(agility). The subjects of control group made routine training in this period. Before and after the training period, the experimental and the control group subjects were tested by Illinois Agility Run test. All gathered data were analyzed by the SPSS for Windows, Descriptive analysis was made for mean, standart deviation, minimum and maximum. Mann-Whitney U test was used to compare experimental and control group.

At the end of research, comparison of experimental and control group resulted in significant improvements in the agility test (Z=3,74) at level p<0.01.

P061**Coaching****THE COMPARISON AND CONTRAST OF FATIGUE AND RECOVERY LEVELS IN FOOTBALLERS OF DIFFERENT CATEGORIES THROUGH THE REPETITIVE SPRINT TEST**

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* Ondokuz Mayıs University, School of Physical Education and Sports

¹ Atatürk University, School of Physical Education and Sports

Purpose: The purpose of this study is to compare and contrast the fatigue and recovery levels in footballers of different categories and genders in repetitive sprints.

Material And Method: The Erzurumspor, Samsungücü female football teams, two football teams in the first and second amateur leagues and students of physical education and sports were applied the 34,2 meters test by Bongsbo. In the sprint intervals, the 50 meters distance was covered with an averagely 25 second relaxation sprint. The measures were carried out by photocell chronometer, Polar Heart Rate Telemeter and OMRON R3 Pulse meter. In the analysis and scheffe test were applied. The determination of fatigue and recovery levels was carried out in the sprint test by Bongsbo.

Findings: It was observed that the best sprint averages were Erzurumspor 6,62 second, Samsungücü 7,03 sec. 1st amateur 5,97sec. and 2nd amateur 6,36 sec, students 6,86 sec. and the worst sprint averages were Erzurumspor 6,88 sec, Samsungücü 7,73 sec, 1 st amateur 6,34 sec, 2nd amateur 6,83 sec and students 7,29 sec. It was also observed that fatigue rates were as follows; Erzurumspor 0,26 sec, samsungücü 0,71 sec, 1st amateur 0,44 sec, 2nd amateur 0,47 sec, and students 0,42 second. At the end of the sprints heart beat frequencies were found as Erzurumspor 172,56 beats/min, Samsungücü 185,94 beats/min, 1st amateur 181,94 beats/min, 2nd amateur 178,82 beats/min and students 183,72 beats/minute. After the 5 minute relaxation following the sprints the heartbeat frequencies decreased by 98,81 beats/min for Erzurumspor, 113,35 beats/min for Samsungücü, 97,57 beats/min for 1st amateur, 101,00 beats/min for 2nd amateur and 122,88 beats/min for the students.

Conclusion: For male footballers who have exercised be forehead, a 25 minute active relaxation can be accepted adequate for a recovery level in the repetitive speed sprints. For male footballers who have well exercised in order to improve speed and continuity in speed, an active relaxation shorter than 25 seconds in repetitive sprints may be allowed. But for female footballers, the duration of active relaxation between sprints must not be shorter than 25 seconds.

P062**Coaching****RELATIONSHIP AMONG THE TRAINING PARAMETERS AND OLYMPIC SNATCH PERFORMANCE**

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Objective: The purpose of this study was to investigate the relationship among the olympic snatch performance and the train-

ing parameters which were calculated during the national camp session. Method: 7 male national level junior weight lifters (age [years]= 18.74 ±1.34; height [cm]=169.36 ±7.50; body weight [kg]= 73.30 ±15.15) were performed the olympic snatch during the simulated competition at the 3rd (pre-test) and the 80th (post-test) days of world championship preparation camp which was ended five days before the competition. Snatch performances were filmed by two video-cameras (50 Hz) during the olympic snatch in each competition day following the anthropometric tests, squat (SJ) and counter movement jump (CMJ). 18 antropometrical points were selected for digitization in each view and calibration cage with 12 points used for three dimensional transformation in APAS (Ariel Dynamics). Velocity of centre-of-gravity and average and peak snatch power were calculated from the raw position datas of centre-of-gravity, left and right side of the barbell; SJ power (SJP) and CMJ power were also calculated for pre and post-test (Sayers, 1999). Number of movement (M), volume, relative volume, intensity, relative intensity, total repetitions (TR) and relative repetitions were calculated from the training which was applied between the pre and post test.

Results: There were significant differences on relative snatch performances and SJP between pre and post tests (respectively; $t= 2.443$ and $t= 3.551$; $p<0.05$). There were significant positive relationships between relative snatch alteration and M ($r= 0.79$, $p<0.05$) and also TR ($r= 0.90$, $p<0.05$).

Conclusion: It is concluded that the number of movements and the total number of repetitions determined in preparation to world championship weight lifting training are the indicators of snatch variation relative to body weight.

P063

Coaching

THE EFFECTS OF TWELVE WEEKS BASIC SWIMMING TRAINING ON PHYSICAL AND MOTORICAL QUALIFICATIONS OF 7-12 YEARS AGED BOY AND GIRL SWIMMERS

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* *KOU, School of Physical Education and Sports*

The purpose of this study was to investigate the effects of twelve weeks basic swimming training on physical and motoric qualifications of 7-12 years aged boy and girl swimmers. Experimental group consist of 43 children (15 girls and 28 boys) from "Summer Swimming School" which is designed for 7-12 years aged children by Kocaeli University and the control group consist of 43 children (15 girls and 28 boys) randomly selected from same ages from Private Seymen Elementary School.

The collected data had been entered in SPSS 7,5 software for Windows and analyzed using descriptive statistics, Mann Whitney U, Kruskal-Wallis and Post-Hoc tests.

0,01 significancy level of difference found between the following parameters in defined groups; boy experimental group's, % body fat, dominant hand acoustic reaction time, right and left hand grip strength, length, right and left hand visual reaction time, boy groups' right and left hand visual reaction time, dominant hand acoustic reaction time, right and left hand grip strength, vertical jump and girl control group's left hand visual reaction time, girl groups' vertical jump, left hand visual reaction time, weight, %body fat.

0,05 significancy level of difference found between the following parameters in defined groups; boy control group's % body fat, boy groups' %body fat, length, dominant hand acoustic reaction

time, 30 meter sprint, left hand grip strength, girl groups' right and left hand visual reaction time, dominant hand acoustic reaction time, weight, girl control group's length.

P064

Coaching

ANAEROBIC POWER AND AEROBIC ENDURANCE ON SOCCER GAME POSITIONS

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Objective: Purpose of study was to compare physical and physiological characteristics of elite young soccer players concerning game positions and determine relationships between them.

Methods: 26 young players (age 16.11 ±1.39) from Galatasaray SK Soccer Team participated. Kruskal-Wallis Test was used to determine differences between game positions, Spearman Correlation Test to determine relationships between variables.

Results: Physical and physiological parameters of young players concerning game positions were as; defenders age 15.87 ±1.35, height 171.68 ±3.90 cm, weight 63.37 ±3.33 kg; midfielders age 16.40 ±1.50, height 172.05 ±6.14 cm, weight 59.32 ±6.84 kg; forwards age 16.00 ±1.41, height 177.37 ±5.47 cm, weight 68.96 ±8.28 kg. Anaerobic power (kgm/s) and aerobic endurance (ml.kg⁻¹.min⁻¹); defenders 93.15 ±9.18, 53.11 ±4.12; midfielders 87.39 ±12.16, 54.25 ±5.71; forwards 102.27 ±17.06, 52.72 ±3.91.

Conclusion: Training programs could be planned according to players' game positions, and so players could satisfy the needs of game positions.

P065

Health and Sports

CIGARETTE SMOKING PREVALANCE IN UNIVERSITY STUDENTS DENİZLİ- 2003

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Objective: Using cigarette is a very important health problem (1). The prevalence of cigarette use is getting increase rapidly in Turkey (2). The aim of this study was to estimate the prevalence of cigarette use among students in Pamukkale University.

Method: A random sample 16 classes were selected from Faculty of Education in Pamukkale University. 632 students (53.5% females and 6.5% males) were participated in this study. A questionnaire was used for measuring cigarette use. Chi-square test was used for statistical analysis.

Results: Daily smoking prevalence rates among female and male students were 28.4% and 42.2%, respectively. Females and males were significantly different in their use of cigarette ($p>0.05$). Quit ratios were 1.5% in females and in 2.7% for males. Economical status, parental cigarette use associated with student smoking ($p<0.05$). Gender differences was not found for reason of initiation smoking ($p>0.05$). The percentages of initiation reasons were friends use of cigarettes (40.5%), personal and parental problems (40.5%), Habitting and dependence (9.1%) and relaxing with

smoke and enjoying smoke (10.0%). The rate of smoking during university was significantly higher than before university education ($p < 0.05$).

Conclusion: These data showed a gender differences for cigarette use and effects of environment on cigarette use in university students.

P066

Health and Sports

EFFECTS OF THE WALKING AND STEP AEROBIC EXERCISES PROGRAMS ON PHYSICAL FITNESS IN OBESE WOMEN

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The aim of the research was to evaluate the physical and physiological changes of obese women who jointed to three different aerobic exercise program. Sixty sedentary obese female subjects who have visited to Istanbul University Institute of Cardiology Obesity Department were participated in this study during the 1st of March 2004. Three different exercise programs have been used on these subjects. The subjects has been grouped and the first group ($n=20$) has used diet and step-aerobic exercise program, the second group ($n=20$) has used diet and walking program and the third group has used only diet program. First group has been on diet for 10 weeks and made step aerobic program for one hour per a day during 3 days in a week. Second group has been on diet for the same period and walked for one hour per a day. The weight, height, body mass index (BMI), body fat percent, circle measurements, flexibility tests, total cholesterol and blood measurements of the subjects have been recorded. All of the measurements and tests have been done in advance and at the end of the programs.

At the end of the study, there were significant decreases in the body fat percent, BMI, total cholesterol of the 1. and 2. groups. Moreover there were decreased on the circle measurements and LDL cholesterol level. There were peaks on flexibility measurements among 3 groups. However the results were not statistically significant according the results of our study. We can say that the most effective treatment method on weight losing is diet with low calories and step aerobic exercise.

P067

Health and Sports

THE VALIDITY AND RELIABILITY OF REGULATING EXERCISE INTENSITY BY BORG'S SCALE IN STEP DANCE SESSIONS

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Objective: The purpose of this study was to determine the validity and reliability of regulating exercise intensity by Borg's scale in step dance sessions.

Methods: 10 university students between the ages of 18-27 years (age = 23.10 ± 2.37) participated in this study voluntarily. Subjects participated in two step dance sessions for 45 minutes at 70-80% of their heart rate reserves with a week interval. The step dance sessions included same choreography with 10 minutes of warm-up, 25 minutes of main part, 5 minutes of calisthenics for

legs and abdomen and 5 minutes of cool down periods. During sessions subjects ratings of perceived exertion (RPE) was determined by Borg's Scale together with heart rate (HR) and lactic acid (LA) levels with 10 minute intervals. For statistical analysis Pearson Product Moment Correlation and Intra-class Correlation Techniques were used.

Results: During the first step dance session there was a significant and strong correlation between RPE20 and HR20 ($r=0.823$, $p < 0.05$) and during the last step dance session significant and strong correlation was found between RPE10 and HR10 ($r=0.676$; $p < 0.05$). No other significant correlations were found between RPE and HR in other time intervals ($p > 0.05$). Similarly in the first step dance session, significant and strong correlations were found between RPE10 and LA10 ($r=0.703$; $p < 0.05$) and RPE30 and LA30 ($r=0.700$; $p < 0.05$) however no significant correlations were found between RPE and LA in the last step dance session ($p > 0.05$). In addition, the intra-class correlation indicated high reliability in RPE scores between the first and last step dance sessions ($F=6.319$, $R=0.842$)

Conclusion: The findings of the present study indicated that the Borg's scale was a reliable but not a valid method for regulating exercise intensity in step dance sessions.

P068

Health and Sports

THE EVALUATION OF THE RELATIONSHIP BETWEEN THE SOMATOTYPE COMPONENTS WITH HEALTH-RELATED PHYSICAL FITNESS PARAMETERS IN GIRLS

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The aim of this study was to investigate the relationship between somatotype components with health-related physical fitness in girls.

The subjects of this study were 580 girls (8-10 years old), from elementary school. In order to identify the somatotypes of the subjects their height, weight, skinfold, diameter and circumference were measured by using Heath-Carter Anthropometric Method. In the identification of physical fitness related to health, sit-and-reach, 1-min sit-up, pull up and 1 mile run/walk tests were applied.

While a high positive relationship between endomorphy with sum of skinfold values ($r=0.97$) were obtained; low negative relationships between the endomorphy with the values of flexibility ($r=-0.15$), between the endomorphy and number of sit up ($r=-0.18$), between the endomorphy with the number of pull up ($r=-0.25$) were obtained; a moderate positive relationship was identified between endomorphy with the value of the duration of 1 mile run/walk test ($r=0.54$) ($p < .01$). A high positive relationship between mesomorphy with sum of skinfold ($r=0.73$); a low negative relationship between the mesomorphy with the number of sit up ($r=-0.14$), between the mesomorphy with number of pull up ($r=-0.18$); a moderate positive relationship between the mesomorphy with the values of 1 mile run/walk test were identified ($p < .01$); whereas, no statistical relationship ($p > .05$) between the mesomorphy and flexibility ($r=-0.06$) were obtained. While a high negative relationship between ectomorphy with sum of skinfold values ($r=-0.74$); low positive relationship between the ectomor-

phy with the number of sit up ($r=0.21$), between the ectomorphy with number of pull up ($r= 0.17$); a moderate negative relationship ($p<.01$) between the ectomorphy with 1 mile run/walk test values were obtained; no statistical relationship ($p>.05$) between the ectomorphy with flexibility values ($r=0.01$) were identified.

Somatotype components and health-related physical fitness scores (means, standard deviation) of participants (n=580)

VARIABLES	X	SD
Age (year)	8,9	0,8
Endomorphy	3,6	1,5
Mesomorphy	4,3	1,4
Ectomorphy	2,6	1,3
Sum of skinfold (mm)	41,9	19,1
Sit and reach test (cm)	22,5	5,1
1 min. sit-up test (number)	19,6	9,9
Pull-up test (number)	0,4	1,1
1 mile run/walk (min:sec)	11:26	01:50

Pearson Correlation Coefficient (r) between somatotype components and health-related physical fitness scores (n=580) * $p<0,05$ ** $p<0,01$

	Age(year)	Sum of skinfold (mm)	Sit and reach (cm)	1 min. sit-up (number)	Pull-ups (number)	1 mile run/walk (min:sec)
Age (year)	1	0,15**	0,02	0,11**	-0,01	-0,12**
Height (cm)	0,59**	0,40**	-0,07	0,16**	-0,03	0,41**
Weight (kg)	0,41**	0,82**	-0,05	-0,04	-0,13**	0,41**
Endomorphy	0,07	0,97**	-0,15**	-0,18**	-0,25**	0,54**
Mesomorphy	-0,08*	0,73**	-0,06	-0,14**	-0,18**	0,49**
Ectomorphy	0,10*	-0,74**	0,01	0,21**	0,17**	-0,40**

This study results showing that there are low negative relationships between the endomorphy values of prepubertal girls with the performances of health-related physical fitness tests; that, unlike that of adults, there are low negative relationship between the mesomorphy with muscular strength test performances; that there are low positive relationships between the ectomorphy with muscular strength test performances; and that with cardiovascular performance, there is moderate negative relationship between endomorphy and mesomorphy but positive relationship between ectomorphy.

P069 Health and Sports

CHANGES IN BODY TEMPERATURE BEFORE AND AFTER HEAT ACCLIMATION IN HUMANS

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We investigated how core temperature of humans changes after acclimation to heat given in two different modes. The residents in a temperate zone (Japanese) were used as subjects. The experiments were performed in early spring to make sure that the sub-

jects were not acclimated to heat. In the first experiment, 5 subjects stayed in a tropical rain forest climate (Thailand) for 21 days to attain heat acclimation. Their oral temperature (Tor) was measured in bed just after waking up before, during and after the stay in Thailand. The Tor of the subjects promptly increased after the start of heat exposure and gradually decreased during the stay in the tropical area. The Tor restored to the level before the trip to Thailand within ca. 12 days. After coming back to Japan, the Tor minimally altered. In the second Experiment, 4 exercise-trained subjects stayed in Thailand for 12 days. The subjects exercised for about 1 h in the morning for more than 10 days before and during the stay in Thailand. Their Tors were measured as in Experiment 1. During the stay in Thailand, the Tor level was consistently kept at a high level. The high Tor persisted after returning to Japan. The results suggest that the changes in core temperature depend on the mode of heat exposure adopted for heat acclimation in humans. In addition, it appears that the direction of body temperature shift after heat acclimation follows the change in body temperature caused by the heat exposure schedule.

P070 Health and Sports

HEALTHY LIVING

* Milana Nostramaite

* Fitness Club

Healthy Living - everybody knows this sentence, but never analyses how to reach it and that is a long way to go. Most of people do not know exact information about healthy food, body training and its benefits. Magazines and newspapers also TV programs full of fraud. Very often people believe in everything they see on TV. The main problem is about various diets and losing weight programs. People don't think too much are they losing total body weight (mainly fluids), or body fat. Definitely they don't want extra body fat. So, by choosing incorrect diet programs you lose body fluid, but not fat.

Healthy Food: What is healthy food? Healthy food is low in fat and high in carbohydrates, also including vitamins and minerals. Most of energy we get from carbohydrates, protein and certain amount of fat. That's why is so important for us to know how much do we need each day if we want to live healthy.

Water - is an energy source. About 70 percentage our body contains water. It is very important to drink plenty of water, especially on training session. My experience shows that many fitness instructors don't know the benefits of water. They tell clients not to drink water at all when they train in order they will lose weight finally. I don't agree with their opinion, because I know that clients aim to lose body fat, but not fluid. Losing lots of fluid can cause very bad consequences. As I know water helps you to perform better, reduces lactic acid, gives energy. Those instructors claim that when you lose water from your body, after that, body starts using fat for the energy. I know that our body uses carbohydrates, proteins and fats at the same time just different amount which also depends on what intensity you are working. My opinion we need to reeducate people with right information.

Conclusion: In conclusion Healthy Living is energy input and output in equal amount. Sport gives us more energy, self confidence, core stability, good mood and many other benefits. I can say that healthy living contains not just healthy eating habits, but also regular training. As a fitness instructor it's my pleasure to help clients to achieve it. Not just good advice, but also good motivation and hard encouragement is very useful.

P071**Health and Sports****THE EFFECTS OF ADDITIONAL ECCENTRIC LOADING ON SUBSEQUENT CONCENTRIC STRENGTH*** Salih Pınar, ¹Bülent Hatip* MU, School of Physical Education and Sport¹ Coliseum Sports Center

The purpose of this study was to measure the effects of additional eccentric loading on subsequent concentric strength.

20 subjects with some experience in weight training volunteered to perform maximal attempts in the arm curl using detaching hooks that allowed them to lower 105% of their concentric 1 repetition maximum (RM) and raise 100%.

The detaching hooks allowed attachment of extra weight to the bar and would release from the bar at the bottom of the lift, reducing the weight lifted during the concentric phase of the lift. After determining their 1RM for the two arm curls, the subjects attempted to increase their performance by using a heavier eccentric load with the detaching hooks.

All 20 subjects who completed the study increased their 1RM by 2,5 to 7,5 kg.

The use of additional eccentric loading significantly ($p=0.001$) increased the weight that could be lifted on the subsequent concentric phase and therefore 1RM performance.

Athletes who are interested in developing 1RM strength in the two arm curl may benefit from the use of additional eccentric loading.

P072**Health and Sports****THE EFFECT OF THE 10-WEEKS AEROBIC EXERCISE PROGRAMME OF THE YOUNG, WORKING SEDANARY INDIVIDUALS ON THE THEIR PHYSICAL FITNESS LEVELS AND BLOOD PRAMETERS*** Ömer Can Göksu, ^{*}Hülya Akdur, ^{*}Nilüfer Ülger,¹Zerrin Yiğit¹ Istanbul University School of Physical Education¹ Istanbul University Cardiology Institute

The study was participated by a group consisting of 20 working sedantary subjects, 10 males and 10 females, with an average age of 26.9 ± 2.1 . In order to determine the physical fitness levels of the participants, we noted down the age, stature, body weight, body composition values, body mass index, fat ratio, fat weight, peripheral measurements, elasticity, oxygen consumption capacity, jumping ability, and explosive power levels of each subject. Measurements were made at the biochemical laboratory in order to determine the blood profiles. Statistical evaluations were made employing the "ANOVA" test by calculating the average \pm standard deviation, and the values by sex were obtained by employing the X2 test.

As a result of our study, it was found out that the 10-weeks aerobic exercise programme in young and working sedantary people provided no significant results in terms of physical fitness except for the flexibility tests values; nor it had any significant influence on the blood parameters except for the blood glucose, plasma sodium and creatinine.

P073**Health and Sports****THE EFFECTS OF AEROBIC TRAINING PROGRAM ON THE PHYSICAL FITNESS IN YOUNG WOMEN*** Nurtekin Erkmen, ^{*}Gülsüm Baştuğ, ¹Özden Taşğın* Gazi University, Institute of Health Sciences¹ Selçuk University, School Of Physical Education And Sport

The purpose of this study was to determine the effects of 3-months aerobic training on physical fitness of young women. The subjects were 35 female Physical Education and Sports Students. The average age and height of subjects were 20.43 ± 1.79 years and 163.46 ± 6.18 cm. During 3-months, subjects participated in a 35-40-minute aerobic training program three times a week. The intensity of exercise was specified as 40-60% according to Karvonen Method: As a result of 3-months-exercise the following results were found significant; body mass, resting heart rate, hand grip, flexibility and body fat % ($P < 0.05$). This shows that doing exercising makes positive effects on both the body composition.

P074**Health and Sports****RELATIONSHIP BETWEEN ABDOMINAL STRENGTH/ ENDURANCE TEST, TEST TIME AND BODY COMPOSITION IN CHILDREN*** Şükrü Serdar Balcı, ^{*}Hacı Ahmet Pekel, ^{*}Kemal Tamer* Gazi University, School of Physical Education And Sport

In this study, the relationship between 1-minute bent-knee sit-up test for abdominal strength/endurance which is used for children in physical fitness test batteries, test time and body composition in children were investigated.

Physical characteristics and sit-up scores (means, standard deviations) of participants

VARIABLES	BOYS			GIRLS		
	n	X	SD	n	X	SD
Age (year)	497	10,1	1,0	480	10,0	1,0
Height (cm)	497	141,4	8,6	480	141,1	9,6
Weight (kg)	497	36,1	8,6	480	36,3	9,2
BMI (Kg/m ²)	497	17,9	3,2	480	18,0	3,0
1 min. sit-up(number)	497	31,2	8,8	480	25,0	9,3
First 30 sec sit-up (number)	497	17,9	4,1	480	14,9	4,8
Last 30 sec sit-up (number)	497	13,3	5,2	480	10,1	5,3
Sum 5 skinfold (mm)	271	41,4	22,0	241	50,3	22,2

The subjects of this study were 977 children who were 497 boys ($10,1 \pm 1$ year) and 480 girls (10 ± 1 year) from primary school students. Body weight, height and skinfold measurements were taken and 1-minute sit-up test was administered for participants. Pearson Correlation Coefficient Analysis was used to determine the relation between the sit-up test, test time and body composition.

Correlations between 1-min sit-ups with first 30-sec sit-ups and last 30-sec sit-ups (* $p < 0,01$)

	boys (n=497)		girls (n=480)	
	First 30-sec sit-ups (number)	Last 30-sec sit-ups (number)	First 30-sec sit-ups (number)	Last 30-sec sit-ups (number)
1 -min sit-ups (number)	0,92*	0,95*	0,92*	0,93*
First 30-sec sit-ups (number)	1	0,77*	1	0,71*

A Pearson Correlation Coefficient Analysis was significant ($p < 0,01$) for the sit-ups performed in one minute with the sit-ups performed in first thirty second ($r = 0,92$). In addition, similar and low negative relationships were found for boys and girls between their body composition with first 30 second and 1 minute sit-ups.

In conclusion when testing high number of children or students it is recommended that 30 second sit-up test can be used instead of 1 minute sit-up test in order to improve the practical application for the children and to save time and effort put by test administrators.

P075**Health and Sports****EFFECTS OF STEP AEROBICS TRAINING ON ANAEROBIC PERFORMANCE OF MALE UNIVERSITY STUDENTS**

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Objective: The purpose of this study was to investigate the effects of step aerobics training on anaerobic performance of male university students.

Methods: A total of 54 male sedentary university students participated in the study voluntarily and were randomly assigned to step aerobics ($n = 27$) and control ($n = 27$) groups. Subjects in the step aerobics group participated in step aerobics sessions of 50 min per day, 3 days per week for 10 weeks with 60-80 % of their heart rate reserve. The control group received no treatment and did not participate in any regular physical activity during the 10 weeks period. Subjects in the step aerobics and the control groups were tested 1 week before and after 10 weeks of step aerobics training period and the tests included measurement of body composition, isometric leg strength, Wingate anaerobic power test and vertical jump test.

Results: Results of independent samples t-test with gained scores indicated significant decrease in body fat percentage of step aerobics group when compared with the control group ($t = -2.117$, $p < 0.05$) and significant improvement was only found in average power relative to body weight ($t = 2.087$; $p < 0.05$) in step aerobics group, there was no significant difference in rest of the anaerobic indices of Wingate anaerobic test and vertical jump test.

Conclusion: These results suggest that 10 weeks of step aerobics training was not effective in improving anaerobic performance of male university students.

P076**Health and Sports****LEVEL OF LIFE STYLE, HEALTH AND EXERCISE OF LECTURER AND UNIVERSITY TEACHER OF TRAKYA UNIVERSITY**

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The aim of this study was to determine level of life style, health and exercise of lecturer, university teacher at Trakya University.

This research is included in women ($N = 22$) and men ($N = 24$) that are lecturer or university teacher at Trakya University in Edirne.

Survey method, a questionnaire including four parts, was used in this research. All gathered data were analyzed by the SPSS for Windows, frequency analysis was made.

At the end of the research, the factors, affecting health of lecturer and university teacher at Trakya University in Edirne, is very much. The factors like that are smoking, stress and drinking alcohol too much. Money for the exercise and exercise level of that people are very low.

P077**Health and Sports****YOUNGS' OPINION AND EXPECTATION WHO PARTICIPATED IN NATIONAL YOUTH CAMP**

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The aim of this study was to investigate of 18-24 aged of young's opinion and expectation about camp who participated in National Youth Camp in Trabzon. Total 136 of young (62 boy and 74 girl), joined in National Youth Camp which organized in Trabzon in 2003, were voluntarily participated in this study as a subjects.

A Survey was applied on young at their guest houses at the end day of the camp (8. day). The survey was composed two sections that personal information and opinion and expectations. In the personal information section there were 11 questions that age, sex, occupation, living area, mother-father education level, monthly outlay level, taking cigarette-alcohol, habits of doing sport. In the other section there were 11 questions that reason of the coming to the camp, most required activity, reason of the prefer of Trabzon, knowing goal of the camp, opinion about whether reach goals of the camp or not, effects of the camp on academic and social activeness, advise of joining camp. As a statistical method cross-tabulation were performed.

The results showed that girls and boy's think that most of them participated in camp for traveling, prefer to Trabzon city for natural beauties, youth camp has positive effects on social and academic achievements and they'll advice participating youth camp to other people. Youth camps has positive effects on young people for traveling different area, meeting new friends and discovering own abilities.

P078**Health and Sports****EVALUATION OF SOME ANTHROPOMETRIC AND PERFORMANCE-RELATED PHYSICAL FITNESS PARAMETERS IN CHILDREN ATHLETES**

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The aim of this study was the evaluation of some anthropometric and performance-related physical fitness parameters in children athletes.

The subjects were 52 boys and 43 girls (11-13 years old) who were trained between 6 months to 1,5 years. To investigate the anthropometric characteristics of subjects, weight, height skinfold, body part diameters, circumferences and lengths measurements were taken and somatotypes were determined. The performance-related physical fitness tests were 30 m sprint, sit and reach, 1 minute sit-up, 1 kg medicine ball throw, standing jump, vertical jump, left and right hand grip and 1 mile run.

In this study there were no significant differences determined between the same age boys and girls of all data which were measured and calculated ($p > .05$). There were statistically no significant differences determined between the age groups of total, sum of skinfolds and percentage body fat means in boys and girls ($p > .05$). Generally significant differences were determined between the 10 and 12-13 years age groups on the other measurement results ($p < .05$, $p < .01$). There were statistically no significant differences between the somatotype components in age and gender groups ($p > .05$). However there were statistically significant differences statistically between gender of 11 age group in the sit-reach tests and between genders of 12 age group in 1 mile run/walk tests in performance-related physical fitness ($p < .05$). There were statistically no significant differences determined between the other fitness tests ($p > .05$) There were no significant differences found between mean test results in 30 m sprint, 1 mile run/walk, sit and reach, standing jump and 1 minute sit-up for both genders ($p > .05$). But there were significant differences at .05 and .01 levels between age groups in medicine ball throw, anaerobic power, right and left hand grip means.

The results indicated that the anthropometric measurements of boys are higher than girls with the exception of sum of skinfold and percentage body fat. The results also showed that the age because of the growth and maturation. All the anthropometric variables were increased with age. It was determined that boys were mesomorphic-endomorph, but girls were endomorphic-ectomorph. It was seen that 10-13 years old boys and girls who participated in athletic, have similar body structure and physical fitness performance and the differences which were determined seen only between the ages instead of gender.

P079

Health and Sports

HEALTH PROBLEMS AND EXERCISE HABITS RELATED TO SPORTING LIVES OF MALE AND FEMALE NATIONAL ATHLETES WHEN THEIR SPORTING LIFE FINISHED

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Objectives: The purpose of this study is to investigate the health problems and exercise habits related to sporting life of male and female national athletes whose sporting life finished.

METHOD: 58 national athletes (30 male, 28 female) who lives in different cities and whose sporting life finished in the branches of artistic and rhythmic gymnastics, volleyball, track and field, handball shooting, and badminton participated to this study. A questionnaire which is consist of 19 questions was developed by researchers and data was obtained. Some questions in biographic in formations, health problems during and after the sporting lives and exercise habits of the athletes were asked. In data analyzed, descriptive statistics (percent, mean and standard deviation) were used.

Results: These are the main results in this study: - %75.8 of the participants said that at least one times they made serious injuries related to their sports accidents.

- %39.6 of the participants said that they lived rehabilitation period under a physician control.

- %48.2 of the participants said that after making sports accident, they could not get back their normal life and %27,5 said that they still have health problems during their normal life.

- %58.6 of the participants said that at least one times they continued to the competitions injuriously.

- %37.9 of the participants said that they finished their sporting life because of their sports injuries.

- %62 of the national athletes whose sporting life finished said that they do not make exercise regularly after the sporting life.

- %53.4 of the participants said that they do not have regular nutrition habits.

Conclusion: The national athletes whose sporting life finished had sport injuries in their sporting life and these injuries of the athletes affected their normal life when they finished their active sporting life. They did not spend enough time in the medical treatment and rehabilitation period. They did not go to the physician to examine regularly and they did not give enough importance to the their health. Therefore, they did not make exercise regularly when they finished their active sporting life.

P080

Health and Sports

SEX DIFFERENCES TO AEROBIC EXERCISE

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Purpose: The aim of study was determined different between sexes to aerobic exercise. Methods: Fifteen male and fifteen female university students participate that to study school of physical education and sports. Subjects were measurement height, weight and anthropometrics. %fat, body mass index and fat free mass were estimate. VO2Max was determined with Astrand Test. Results: Height was correlated weight ($r = .560$, $p = .030$) and fat free mass ($r = -.530$, $p = .042$) for female. Weight was correlated fat free mass ($r = .839$, $p = .000$) for female. %fat was correlated fat free mass ($r = -.653$, $p = .008$) for female. VO2Max was correlated hearth rate ($r = -.745$, $p = .001$). Height was correlated weight ($r = .629$, $p = .012$) and fat free mass ($r = -.547$, $p = .035$) and %fat ($r = .616$, $p = .014$) for male. Weight was correlated %fat ($r = .591$, $p = .020$) and fat free mass ($r = .978$, $p = .000$) and hearth rate ($r = -.683$, $p = .005$) for male. Hearth rate was correlated %fat ($r = -.590$, $p = .021$) and fat free mass ($r = -.616$, $p = .015$) and VO2Max ($r = -.626$, $p = .013$) for male ($p < 0,01$, $p < 0,05$). Weights, heights, body mass indexes, %fat, fat free mass was significantly different between sexes ($p < 0,01$). Hearth rate was not significantly different between VO2Max ($p < 0,01$).

P081

Health and Sports

GENDER DIFFERENCES IN CONSTITUTIONAL AND PHYSICAL FITNESS CHARACTERISTICS OF ELEMENTARY SCHOOL STUDENTS

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The aim of this study was compare constitutional and physical fitness characteristics of elementary school students according to gender. Subjects were randomly selected from 10 different

elementary schools in Antalya. Ninety-seven girls mean age of 13.50 ± 0.72 years and 101 boys mean age of 13.55 ± 0.71 years and totally 198 students voluntarily participated in study.

For measuring constitutional characteristics of student height, weight, and anthropometric measurements were applied. Eurofit Physical Fitness Tests for Children was used to determine Physical Fitness level of students. In statistical analyses descriptive statistics and independent sample t-test was computed.

According to statistical analyses, there were no significant statistical differences between boys and girls in height, weight and Body Mass Index (BMI) ($p > .05$). It was found that in fat %, and sum of five skinfold thickness there were differences between boys and girls ($p < .05$) in favor of boys. Analyses of physical fitness level of students showed that boys had higher score than girls in hand grip (both hand), standing long jump, bent arm hang, endurance shuttle run and agility shuttle run (10x5 shuttle run) tests ($p < .05$). Only in trunk- flexibility measured by sit-reach test girls had higher score than boys ($p < .05$).

P082

Health and Sports

COMPARISON OF CONSTITUTIONAL AND PHYSICAL FITNESS CHARACTERISTICS OF ELEMENTARY SCHOOL STUDENTS ACCORDING TO THEIR SOCIO-ECONOMIC STATUS

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The aim of this study was to compare the differences in constitutional and physical fitness characteristics of elementary school students according to their socio-economic status. Socio-economic status (SES) of school determined according to State Planning Organizations of Antalya. Subjects were randomly selected from 4 high and 5 low SES schools of Antalya. 119 low SES subjects (52 boys and 67 girls) mean age of 13.73 ± 0.74 years and 79 high SES subjects (49 boys and 30 girls) mean age of 13.21 ± 0.54 years, totally 198 subjects voluntarily took part in the study.

For measuring constitutional characteristics of student height, weight, and Anthropometric measurement was applied. Eurofit Physical Fitness Tests for Children was used to determine physical fitness level of students. In statistical analyses descriptive statistics and independent sample t-test was computed.

As a result of statistical analyses, there were significant differences in weight, BMI, fat % FM between low and high SES group in boys. In physical fitness tests low SES boys group had significantly better performance than high SES boys in flexibility measured by sit and reach test, hand grip test (both hand), standing long jump, bent arm hang and endurance shuttle run ($p < .05$). High SES boys only had better performance than low SES in agility measured by 10x5 shuttle run ($p < .05$)

When comparing the girls in low and high SES, high SES girls had higher than Alt SED girls in height, fat %, FM ($p < .05$). In physical fitness tests there were no differences between low and high SES group ($p > .05$), except for hand grip test ($p < .05$).

P083

Health and Sports

THE EFFECTS OF STRENGTHENING TRAINING OF QUADRICEPS MUSCLE TO PHYSICAL FITNESS TESTS

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Purpose: The aim of this study was to determine strengthening training of Quadriceps Muscles how effect on Physical Fitness Tests for the university students.

Material and Method: Subjects for this study consisted of 25 female university students. In the group I, there were 15 subjects and in the group II, there were 14 subjects. The group I were given Russian electrical stimulation with a frequency of 2500Hz, 10sec"on" time, followed by 50sec"off" time repeated 10 times for maximum tetanic contraction. In the group II, subjects were given terminal isometric exercises with contraction time"10sec", resting time"50sec" repeated 10 times to both of quadriceps femoris muscles of all subjects. All subjects maintained supine position and knees were flexed 60°. Strengthening training continued for 5 days each week, during 6-week period. Subjects of this study were examined using submaximal effort test with cycling ergometer, isometric leg strength with dynamometer, Burpee-test, vertical jump, sit & reach test, skinfold and tight circumference before and after strengthening training. Subjects' degrees of difficulty were assessed with the Borg Scale after submaximal effort.

Result: The results of cycling ergometer, dynamometer, Burpee-test, vertical jump, sit & reach, skinfold and tight circumference in both groups were not significant ($p > 0,05$). The results of submaximal work-load ($p = 0,008$), submaximal diastolic pressure ($p = 0,025$), diastolic pressure in cool down period ($p = 0,010$), in the first minute recovery period showed Group I had an improvement more significant in before and after strengthening training. The results of dynamometer and Burpee-test showed improvement in both groups after strengthening training ($p < 0,01$). The results of vertical jump and sit & reach test showed improvement in group II ($p < 0,01$) but there was no significant improvement in Group I.

Conclusion: The electrical stimulation is said to be effective in improving the aerobic capacity. Quadriceps strength training improved some Physical Fitness Tests in both group after strength training.

P084

Health and Sports

CORRELATION OF VELOCITY, ANTHROPOMETRIC AND STRENGTH PARAMETERS IN TRAINED CHILDREN

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Objective: In relation to Track and Field Federation Talent Identification Project, 84 trained children aged between 12-16 yrs [boy (n) = 38, girl (n) = 46] were participated to the study

as subjects [For boys; age = 14.32 ± 1.14 yrs, height = 166.5 ± 6.55 cm, body mass = 55.30 ± 7.55 kg, body fat % = 12.10 ± 2.33 ; for girls age = 13.85 ± 1.03 yrs; height = 158.83 ± 7.67 cm; body mass = 48.37 ± 9.70 kg; fat % = 20.63 ± 3.39]. Body fat % (Açıkada et al, 1991a; 1991b) and somatotype (Carter, 1985) were calculated from anthropometric variables. Sprints (10m, 20m, 30m and 40m) were timed with electronic timing system (Tümer Electronic Ltd, Turkey). Each subject was started sprint run from 1m behind of the starting line with standing start position. As the strength parameters, vertical jumps [squat (SJ), counter movement (CMJ), and 1.5s multiple (MJ) jumps] and horizontal jumps [standing long jump (SLJ), and standing 3-step jump (STJ)] were measured. Vertical jumps were measured by using an electronic mat (Bosco et al, 1983). CMJ-SJ differences were used for evaluating elastic strength (Bosco et al, 1983). Horizontal jumps were measured in the jumping pool area. Pearson correlation analyse was applied for as a relationship of mean sprint velocities with anthropometric variables, and jumps (vertical and horizontal). For Independent sample t-test was used to determine the gender differences. Significance level was determined as 0.05.

Results: Mean sprint run velocities have medium and high level significant correlation with horizontal jumps, some of vertical jumps, and body fat mass. Nevertheless, mean sprint run velocities have low level correlation with MJ power values and anthropometric parameters except for upper leg length and ectomorphy value. There were significant correlations of mean sprint velocities with MJ power values, SJ, CMJ, SLJ and STJ for boys. However, there were no correlations above mentioned variables for girls. Furthermore, the results have shown that there was a tendency that as sprint distances increased, the correlation of variables have also increased.

Conclusion: As a result, strength parameters showed higher correlation with mean sprint velocities than the anthropometric variables for 12-16 yrs trained children.

P085 Health and Sports

PREVALANCE OF RECOMMENDED LEVEL FOR VIGOROUS AND MODERATE PHYSICAL ACTIVITY AT PRIMARY SCHOOL, HIGH SCHOOL AND UNIVERSITY

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Objective: Two physical activity guidelines are widely used for preventing sedantary life-style related diseases and enhancing cardiorespiratoy fitness. In this study, prevelance estimates of meeting two guidelines based on a retrospective recall of physical activity level at primary school, high school and university in univesity students were evaluated.

Methods: A sample of 164 university students aged 18 to 28 yrs (96 female, 68 male) were participated in this study. Information on physical activity was collected retrospectively using two questions about recalled physical activity at primary school, high school, and university. First question was "do you have been doing vigorous exercise 3 to 5 times for at least 20 minute per session per week" (recommendation of American College of Sports Medicine [ACSM] in 1990 as cardiorespiratory fitness

guidelines)(1). Second question was "do you have been doing moderate physical activity accumaleted at least 30 min 5 or more days per week (recommendation of ACSM and Centers for Disease Control and Prevention [CDC] in 1995 as health-related guideline)(2). Chi-Square for dependant samples (McNemar) was used for statistical analysis.

Results: The percentages of participants meeting ACSM fitness guideline at primary school, high school and university were 64%, 61%, 31.1%, respectively. The proportion at primary and high school was not significantly different ($p > 0.05$), but the ratio of students at university was less than the primary and high school ($p < 0.05$). The percentages of participants meeting ACSM/CDC health-related guideline at primary school, high school and university were 49.4%, 56.1%, 50%, respectively and the percentages meeting this guideline at primary school, high school and university were not significantly different ($p > 0.05$).

Conclusion: It is concluded that university students were less likely to participate in vigorous physical activity than their primary and high school periods. Also, participating moderate physical activity level was similar at all periods of school.

P086

Health and Sports

THE EFFECTS OF WEIGHT TRAINING ON VIEWS OF FEMALE AND MALE UNIVERSITY STUDENTS ABOUT THEIR BODIES

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Objective: The purpose of this study was to obtain information about how weight training effects views of female and male university students about their bodies. This study is a part of an ongoing large project and includes preliminary analysis.

Methods: 4 female and 4 male university students from different departments who were taking the weight-training course participated in this study. Semi-structured focus groups were conducted before and after the 12-week weight-training course according to gender. Data was analysed by content analysis method. Following themes have been identified for discussion by virtue of their relevance to purpose of this study: the reasons of taking the course, body satisfaction before and after the course, and ideal body.

Results: Both female and male university students reported that they participated in the course to become more muscular and fit. With regard to theme of the body satisfaction before and after the course, both of them expressed that they felt more satisfied about their bodies and more powerful. For the last theme, muscular and sporting male bodies are ideal body for males, whereas thin and beautiful model bodies are ideal body for females.

Conclusion: As a conclusion, it was observed that weight-training course has an influence on views of female and male university students about their bodies and makes them more satisfied with their bodies.

P087 Health and Sports

A WORKSITE HEALTH PROMOTION INTERVENTION IN A LARGE COMPANY

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It is known that physical inactivity, one of the major public health concerns, has deleterious effects on many different dimensions of health. Designing to increase levels of physical activity and promote healthy dietary habits among the general population, health promotion programs including workplace interventions have been suggested as potentially effective on individuals health status. Employer-sponsored workplace programs have also reported benefits to the workforce including reduced absenteeism and improved worker productivity. This paper presents the first step outcomes of a work-based health and fitness program. Subjects were 760 blue and white-collar employees of a large textile company in Ankara. 55 volunteers were given a two-days instructional course on physical activity, health, cigarette smoking, nutrition and exercise demonstrations. The physical activity level, assessed by a physical activity assessment questionnaire, body composition (BMI and percentages of body fat), forward trunk flexibility and relative strength calculated from dividing the sum of hand grip, leg and back strength to body weight. All employees also attended 5 hours basic seminars including above mentioned topics and they were informed that the measurements will be repeated in 6 months to get feedback about the developments. The results are given in table.

RESULTS

	MALES		FEMALES	
	Under 25 years of age (n=192)	Above 25 years of age (n=251)	Under 25 years of age (n=162)	Above 25 years of age (n=251)
Weight(kg)	66,56 ± 9,15	71,96 ± 11,49	57,17 ± 9,71	60,15 ± 10,84
Height(cm)	171,30 ± 6,15	169,67 ± 6,07	158,58 ± 6,13	157,53 ± 6,05
Body Mass Index	22,69 ± 2,86	25,00 ± 3,80	22,76 ± 3,83	24,20 ± 3,89
Flexibility (cm)	6,25 ± 10,13	4,77 ± 8,71	7,44 ± 8,00	10,30 ± 7,40
Relative strength	4,47 ± 0,68	4,12 ± 0,72	2,61 ± 0,54	2,59 ± 0,60
Work MET/week	210,11 ± 59,79	187,30 ± 50,39	167,96 ± 45,50	165,81 ± 43,50
Physical Activity MET/week	7,54 ± 13,91	5,49 ± 13,00	6,01 ± 13,94	3,46 ± 9,36
Energy/week (kcal)	22469,27 ± 4504,03	22662,21 ± 441082	17838,09 ± 4031,75	18777,43 ± 4255,83

P088 Health and Sports

INVESTIGATION PREVALENCE OF OBESITY AND OVERWEIGHT ON SCHOOL CHILDREN WHO HAVE DIFFERENT SOCIO-ECONOMIC STATUS

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Objective: To investigate obesity and overweight situation of different socio-economic status with school children in Antalya.

Design: Longitudinal survey of different socio-economic status with school children who had been surveyed 2 yearly between the ages of 7-8.

Measurements: Weight, height and skinfold thickness (triceps, biceps, subscapula and suprailliac) was measured. Socio-economic status was determined according to school status and level of income children's family.

Results: when comparison Values of weight, height, BMI, % fat and fat free mass (FFM) of all school children according to sex, it was found that there was a significant difference in % body fat between girls and boys children. ($p < 0,01$). When comparison all parameter values of school children according to sex and socio-economic status, both girl and boys children who have low and high socio-economic status, there were significant differences between first and second years measurements ($p < 0,01$).

Conclusions: both girl and boys children who has high socio-economic status have fatter and higher values of BMI and % body fat than the others.

P089 Health and Sports

INVESTIGATION OF SOME FACTORS HAVE AN EFFECT ON AEROBIC FITNESS AMONG PE STUDENTS

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The purpose of the study was to investigate some factors that is being considered to have an effect on aerobic fitness among the second year students of coaching department of School of Physical Education and Sports at Marmara University.

Fifteen volunteer students participated in this study. The mean age, height and weight of the subjects were 22,3±2,3(year), 177,3±9,9 (cm) 69,9±13,3 (kg), respectively.

In order to determine body composition of the subjects, body mass index (BMI), fat percent, and waist to hip ratio were calculated. 1 Mile run test and Queens College Step Test were used to find out the aerobic capacity of the subject. Beacke Questionnaire Test and life style inventory were made to evaluate the physical activity level and life style point of each subjects respectively.

Pearson correlation coefficient test (two tailed) was used to find the relation among the variables ($p < 0,05$; $p < 0,01$). Simple and multiple regression test was used to find out the effect of aerobic endurance on body composition ($p < 0,01$)

As a result of this study, significant relationship was found between aerobic endurance and body composition variables ($p < 0,05$; $p < 0,01$). The highest relationship among those variables was fat percentages ($R = .650$, $R^2 = .422$, $f = 10.987$, $p < 0.009$).

P090**Health and Sports****THE ACUTE PHYSICAL EFFECTS OF ACTIVE AND PASSIVE SMOKING ON SEDENTARY MALE UNIVERSITY STUDENTS AGED 18 – 25**

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Purpose: The purpose of this study was to find out the temporary physical effects of passive and active smoking on young male university students.

Methods: Subjects: 42 sedentary male university students aged 18 to 25 voluntarily participated in the study. 15 of the participants were smoker, 15 of them non-smoker and 12 of them were the control group.

Procedure: Participants were invited to the exercise lab twice, in the first meeting physical parameters of the participants were measured and the physical performance test (Bruce Protocol) was applied on the treadmill. 2-3 days later the second test was applied to the participants. The following procedure was applied in the second test day:

- Respiratory function test (pre-post)
- Measurement of reaction time (pre-post)
- Measurement of Expired CO and blood COHb levels (pre-post)
- 1 hour sitting in a room at resting heart rate where the cigarettes smoke CO₂ level is between 25-35 PPM.
- Bruce Protocol treadmill test.

Statistical Analysis: Descriptive statistics were calculated to find out the mean, range, and the standard deviation values of the data. Besides, in order to compare the pre and post test results of the participants, paired samples t-test was applied to the data.

Results: Paired samples t-test results indicated that there is a significant difference ($P < 0.01$) between pre and post physical performance (5.5 %), simple auditory reaction time (RT) (8 %), simple visual RT (6.3 %), total RT (7.6 %) expired CO₂ levels (36.5 %) and blood COHb levels (33.3 %). However, no significance difference could be observed for respiratory functions of young males.

Conclusion: Temporary harmful effects of one hour passive smoking are ($P < 0,01$); 7 % decrease in physical performance, more than 50 % increase in expired CO₂ levels, and blood COHb levels, and up to 10 % lose in reaction time. In addition, smokers expired CO₂, and blood COHb was also found to be increased. It can concluded from the results of this study that, passive smokers are effected more than the smokers in an one hour sitting in a smoked room despite the fact that the smokers smoked nearly 5 cigarettes in that period of time. One hour of passive and active smoking on a canteen CO₂, and SO₂ level matched room has been found to harmful for physical performance, simple auditory RT, simple visual RT, expired CO levels, and blood COHb levels of the sedentary young males.

P091**Health and Sports****COMPARISON OF BODY COMPOSITION BETWEEN 13-18 YEARS SWIMMERS AND NON ATHLETIC GIRLS**

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In this research, which is carried out in order to determine the body compositions of the female swimmers who have participated to the Turkey Championship, the experiment group is made up of 43 female swimmers who form the first 10 in Turkey among their age groups and attend the Federation Arena Cup in 2003-2004 swimming season. The controlling group is made up of 29 females at the same age, who don't do sports.

First of all, the somatotype properties of the test subjects which are extended by this research are determined according to the Heath-Carter method, their body fat percentages are calculated according to the Jackson-Pollock method.

The datas that are obtained from these calculations are classified as the ones that do sports and the others that do not. Afterwards, the same datas are categorized according to the age groups (13-14, 15-16, 17-18) to be analyzed statistically. The datas are analyzed by the "variance analysis technique", different groups are determined by "Duncan multi comparison" test, $p < 0.05$ has been chosen as the level of significance.

At the end of the study, it is discovered that females doing swimming sport and having the age group of 13-18 have longer heights ($p < 0.01$), have lower endomorphy values ($p < 0.01$), have higher ektomorphy values ($p < 0.01$), and do not have significant difference interms of mezomorphy and body fat percentage values ($p > 0.05$), when compared with the resembling age groups.

P092**Health and Sports****THE INVESTIGATION OF THE PHYSICAL ACTIVITY OF ADOLESCENTS**

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The present research aims to compare the physical activities of the Military Academy freshmen of two different backgrounds. Each group consists of 20 cadets. One comprises graduates of military high schools whereas the other freshmen groups have graduated from either private or government high schools. The measurements and tests have been conducted at the sport facilities located on the campus of the Academy.

In this study, the data has been obtained through the following tests and measurements: the percent body fat, lean body weight, body mass index, daily energy expenditure, Basic Metabolism Rate (BMR), physical activity level.

As a result, the measurements regarding the averages of the percent body fat, lean body weight, body mass index, daily energy expenditure, physical activity level yielded no statistically significant difference between the two groups ($p > 0,05$). However, BMR significant differences have been recorded ($p < 0,05$).

Key Words: Percent Body Fat, Lean Body Weight, Body Mass Index, Daily Energy Expenditure, Basic Metabolism Rate (BMR), Physical Activity Level.

P093 Health and Sports

THE EFFECT TO THE RESPIRATION FUNCTIONS OF THE WITH SHORT DURATION SCUBA DIVING

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It affects the diving's breathing system with the aid of all sorts of different factors. The diving type and the effects of these variables on the breathing functions are taken up in many studies. Along with this, short-term amateur sportive SCUBA diving breathing functions effects have not been studies.

This study was applied on the 12 elite athletes (3 girls) have same individual characteristics each other. Subjects diving was recorded by helping diving computer. Respiration function tests were made every morning and every evening along 7 days.

Comparing to the morning diving, there was a clear decrease between FEV1, FEV1/FVC, PEF, FEF25, FEF50, FEF75, and FEF25-75 values. But there was no change between FVC and FIVC values.

There was no significant effect in the short duration study for a week except for FVC and FEV, parameters.

P094 Health and Sports

CARDIAC CHANGES IN PREPUBERTAL SWIMMERS

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Objectives: We aim to determine the cardiac changes in male prepubertal swimmers by using standard echocardiographic parameters and the tissue Doppler imaging. We also aim to examine the correlations between weekly training time, total training age, anthropometric measurements and motor performance parameters.

Materials and Methods: 22 male prepubertal (stage I or II) swimmers who had been training for ≥ 3 years, and for at least 8 hours/week. The control group consisted of 21 boys not participating in regular sportive activities. The age, height and weight of the children in both groups were similar. Echocardiographic examinations were done with Philips EnVisor C Version B.0, using 3.5MHz transducer. Left ventricular (LV) dimensions and systolic function were examined with M-Mode, transmitral flow velocities and durations were measured with CW Doppler, and tissue Doppler velocities and durations were measured with PW tissue Doppler echocardiography. The regional velocities of the lateral mitral annulus, LV posterolateral wall and midseptum were examined. Anthropometric measurements and motor performance parameters were assessed in 8 of 22 swimmers and 9 of 21 controls. **RESULTS:** Mean age, mean height, and mean weight were similar in both groups ($p > 0.05$). Septum thickness, LV posterior wall thickness, LV mass and relative wall thickness were increased in swimmers ($p < 0.05$). All the tissue Doppler measurements were similar in both groups except the septal isovolumic relaxation

time (IVR). The septum thickness and mitral annular IVR were negatively correlated with the total training time in swimmers ($p < 0.05$, $r = -0.42$, $r = -0.55$ respectively). There was a negative correlation between weekly training time and mitral annular IVR and septal isovolumic contraction ($p < 0.05$, $r = -0.44$, $r = -0.45$ respectively). The biacromial diameter, biacromial index and bitrochanteric diameter were significantly smaller in swimmers. The aerobic endurance and the explosive power were enhanced, but the muscle power parameters were decreased in the swimmers.

Conclusion: We observed that the LV wall thickness has been increased concentrically in prepubertal swimmers compared to controls, without a significant change in the LV diastolic diameter. This is contrary to the previous studies on adult swimmers. Whether the structural changes observed in this study reflects the unique cardiac adaptation of pediatric heart to exercise maybe disclosed by longitudinal studies of prepubertal athletes.

P095 Health and Sports

COMPARISON OF PHYSICAL ACTIVITY LEVELS OF THE STUDENTS IN ISTANBUL UNIVERSITY WHO TAKE GYM COURSES AND WHO DON'T TAKE GYM COURSES

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To determine physical activity levels of students in Istanbul University who take physical education (PE) courses and who don't take PE courses a total of 110 students, 67 male and 43 female were taken as test subjects. The average age of the students were 21.4 ± 1.940 years, average body weight was 63.336 ± 9.851 kg. And average height was 172.85 ± 0.83 cm. To determine the physical activity levels (PAL) of the subjects a survey, consisting of eight questions, was used and physical activity score (PAS) were calculated according to the survey. As a result of these calculations, the average PAS of all subjects were found as 62.609 ± 21.887 . In respect of the top score (139) of the survey, the average score of the subjects were $45.042 \pm 15.746\%$. The average score of female subjects were 52.186 ± 19.025 , and this is $37.544 \pm 13.687\%$. The average PAS of male subjects were 69.298 ± 21.086 and this is determined as $49.855 \pm 15.170\%$. The subjects who took gym courses when studying in the university had an average PAS of 61.035 ± 23.146 . The percentage of this score was 43.909 ± 16.652 . PAS average of the students who had not took PE classes was 64.843 ± 20.382 . The percentage of this score was 46.649 ± 14.663 as a result of the statistical analysis, it is seen that there is no difference in physical activity scores of the students who took PE classes and who did not took PE classes. This result shows us the existing physical education classes have to be re-considered.

P096**Health and Sports****EVALUATION OF THE FUNCTIONAL CAPACITY OF THE ELDERLY LIVING IN NURSING HOME WITH AN ACTIVE LIFE STYLE**

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In this study; the socio-demographic status, functional capacity and the life satisfaction of the elderly (n=10, mean age: 75.90±5.21years, 7F / 3M) living in SHÇEK İzzet Baysal Nursing Home with an active life style was evaluated, and the relationship between the life satisfaction and the functional capacity of them was examined. With regards to socio- demographic characteristics, all of the group had health insurance, income, hobby and regular exercises habits, children. In addition to this none of the subjects had illiterate. The statistical significant associations were found between FIM scores and mental health scores (p≤0.05). LSI-A scores were also related with visual and auditory reaction time (p≤0.05). In the linear regression analysis visual and auditory reaction time were found to be statistically significant predictor factors of FIM (p≤0.05). Furthermore, in the other linear regression analysis we identified a predictor factor of the LSI-A. There was visual reaction time (p=0.03).

The study showed that the mental capacity of the elderly was higher among the ones having higher functional independence. Additionally, as the auditory and visual reaction time was decreasing, the functional independence and the life satisfaction of the elderly were increasing.

P097**Management and Organization****EVALUATION OF THE RECREATIONAL LEADERS EXPERIENCE IN UNIVERSITY LEISURE PROGRAMS**

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There are many approaches to the analysis of leisure programs and discussions according to the past researches (Atara & Ruth, 04; Little 93; Henderson, 96). Young people can satisfy many of their basic needs & achieve happiness in many and varied ways during leisure time (Elie, 04; Ruskin, H&at.al, 95). The aim of this research was to evaluate recreation leaders' experience in university leisure programs.

The method applied in this study was qualitative in nature. The participants were 18-25 years-old 3 female and 7 male total 10 students in AIBU in Bolu-Turkey. Through 10 weeks period, participants voluntarily attended in the leisure program design in which planning, implementation and evaluation periods. The data were collected via observation, by the two observers. Partially-structured field work used as observation techniques: (1)Group discussion and evaluation (2)Observation of the participants in the duration of leisure program planning, implementation and evaluation periods. (3)Diary of participants (4)Activity evaluation and programmers' self evaluation with evaluation forms; (planning, coordination, responsibility, willingness, organization, creativity). In addition, in order to allow the use of triangulation

which is a measure of reliability and validity, multiple types of data were collected including field notes, video recordings and photographs. The data was coded and analyzed to determine themes which could reveal deeper meaning and key themes.

As a result, participants had a general understanding and faced of the leisure program periods from which planning, implementation and evaluation parts. In addition, the opportunities in active participate as recreation activity leader in all leisure program periods provided a variety of options as the individual and leadership experience, self-concept and self-investigation while leisure program evaluation. And also the concepts of teamwork, communication with peers and willingness to program design and implementation were observed. In addition more enthusiasm, self consciousness, self discipline, interest and enjoyment were found to be dominant and part of the leisure program.

P098**Management and Organization****THE ANALYSIS OF THE FACTORS AFFECTING THE PRODUCTIVITY OF CITY ADMINISTRATORS OF THE YOUTH AND SPORT GENERAL MANAGEMENT**

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The purpose of this study is to indicate the impressions of the city Administrators about the factors affecting the productivity of the city administrators of Youth and Sport.

In this research, qualitative method was used. The data were provided from the half- settled interviews. In addition to this, easily - reachable situational exemplifications and quantity exemplification types were used. The data were analyzed by using descriptive and content- based analysis methods.

The factors affecting the productivity of the administrators were asked to the administrators under the titles of six main issues; administrative approach and management style, technology, motivation, communication, self-improvement and organizational position.

As a result of this research, it was concluded that these factors affected the productivity of Youth and Sport City administrators.

P099**Management and Organization****LEADERSHIP ANALYSIS OF THE GENERAL SECRETARIES OF SPORT FEDERATIONS**

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* Gazi University

The objective of this study is to determine the leadership types of the general secretaries working for the sport federations of Directorate General of Youth and Sports and developing hypothesis according to the obtained data.

The research uses the cross-hatching model. A theoretical frame has been developed by examining the relevant literature that includes information about the research problem. In addition; the data are obtained via the Leadership Orientation Inventory that has been developed by Fred Luthans of Nebraska University.

The observation universe of the study is the 46 General Secretaries who works at the sport federations of Directorate General of Youth and Sports. The inventory has been applied to whole re-

search universe and 42 of them have taken to consideration. The data have been analyzed with a computer via SPSS 10.0 Statistics Program. First the percentages and the dispersal frequency of the data gathered then significant differences between the subjects and some variables searched. After the data cross – examined via T-Test and variance analysis, result have been evaluated.

As a result, no significant difference of leadership behaviors found between the members of the group based on age, gender, time of service, graduation department. On the other hand; where there wasn't any significant difference of work oriented leadership between gender and graduation department groups, there was difference of .05 for service groups and .01 for age groups.

P100 Management and Organization

A STUDY ON THE IMPORTANCE OF COMMUNICATION IN SPORTS AND ITS EFFECTS UPON TEAM PERFORMANCE

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The main target of this research is to mention how much the communication process and concept important to improve the performance of the players and the teams in sport clubs.

The research has been done by using field work and scanning literature method.

The fieldwork comprise of the research contains a group of 135 footballers who have taken place in the teams of the Turkish Professional Super League in 2001-2002.

In order to collect fieldwork datas, the survey form has been developed. To anlysis the datas the ratio of frequency system is used. The research consists of your main chapter including introduction to the research, material and method, data, argument and conclusion. In the introduction part, theoretical information is given. In material and method part, the processes of the researches are mentioned and the result datas are presented in the data section. In the argument and conclusion section, checking the datas of the researching an argument is established and the personal result is mentioned.

According to the datas of the research; the lack of communication problems between the footballers, who have been playing football in the teams of the Turkish Professional Football Super League coaches, managers and the other footballers are mainly because of the club managers. Besides, footballers do really need and miss the real communication with their coaches and managers, as well. Under the information of this research, the important datas are mentioned and these results are proposed to be used in other scientific researches related with this subject soon.

P101 Management and Organization

PERCEIVED PERSONALITY CHARACTERISTICS OF SPORT

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To know what the targeted consumers perceive about sport can be effective in order to develop marketing strategies in sport. The aim of this study was to determine the personality

characteristics of general sport and different sports perceived by the university students. The subject group consists of 312 students. Adjective Check List (ACL) and a questionnaire were used in this study. The students were asked to mark the adjectives that define sport according to them. In addition, they were asked to mark the adjectives for volleyball, wrestling, soccer and basketball. The data were analysed by a software programme prepared for this test and sub-scale points were obtained. Five sub-scales that had the highest mean value were accepted as the typical personality characteristics of general sport and different sports. ANOVA was used in order to test the differences among the personality characteristics of volleyball, wrestling, soccer and basketball perceived by the 0,01 and <subjects. SPSS programme was used for statistical analysis. The p 0,05 levels were selected as the criteria of statistical significance. It has <p been found that the typical personality characteristics of sport were aggression, dominance, achievement, masculinity and exhibition according to the subjects' perceptions. Although self-idea, self-confidence and especially creativity personality were not the main characteristics for sport, they were superior characteristics in volleyball. Superior personality characteristics of wrestling were masculinity, dominance, aggression, achievement and self-idea. The determined superior personality characteristics of soccer were found as aggression, autonomy, exhibition, masculinity and dominance. And for basketball, they were aggression, exhibition, creativity, achievement, autonomy and dominance. Creativity personality characteristic was found only in volleyball and basketball. It has been found that there were significant differences (p<0,01) in all the sub-scales except achievement and dominance. There were differences in the perception of sports when they were compared according to the gender variable.

P102 Management and Organization

MANAGER AND FANS' OPINION AND EXPECTATION ABOUT SECOND PROFESSIONAL SOCCER LEAGUE TEAM

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The aim of this study is to investigate of manager and spectators' opinion and expectation about second professional soccer league team. A questionnaire was performed for investigating the Second Professionals of Turkish Soccer team's structures. Six football teams' managers (60) and fans (220) from the teams (total 80) were participated in this study as a subject. As a statistical process chi-square and cross-tabulation were performed for finding ($\alpha=0.05$) significance above features.

The results show that, educational level (P<0.01), level of income (P<0.01), understanding of professionalism (P<0.01), adequacy of sport facility and materials (P<0.01) and value of substructure (P<0.01) harmony of personnel in club (P0.01) and support of fans (P0.01) were significant between managers and fans.

P103 Management and Organization

PROFILE OF SPORT CONSUMERS AND THEIR MEDIA PREFERENCES: DEVELOPMENT OF AN INSTRUMENT

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It is very important that sport media managers and/or sport media marketer should understand sport consumers, their profile, their preferences, and the concept of sport used in the field of sport media. Otherwise, they do not have precise information about sport consumers participants and true vision of the sport industry.

Any useful attempt to study dynamics of sport consumers' media preferences (newspaper) in should begin with the assessment on what constitutes media preferences. Such analyses should begin with the measurement of the various concepts of media preferences held by sport consumers. There are limited number of research studies which are dealt with association between profile of sport consumer and their media preferences in the sport management literature.

Thus, the purposes of the present study were to (1) describe profile of sport consumers in terms of consuming newspaper; (2) develop a scale of sport consumers' media preferences applicable to Turkey settings. In other words, this study examined the development of an instrument to assess preferences of sport consumers about media and relationship between profile of sport consumer and their media preferences. For the purpose of this study, a web site was designed and the data were collected through internet.

The steps in the development of the instrument and the assessment of its psychometric properties included the use of panel of expert, a field test, a pilot test, a confirmatory study and ANOVA. The study was conducted among 554 sport consumers (499 males and 55 females) who were volunteered. The respondents were 17-41 age range ($\chi=28.58\pm 4.76$).

By using principal component analysis with varimax rotation, the construct validity of the scales was confirmed. 19 initial items of sport consumers' newspaper preferences scale resulted in an empirically supported five-factor solution; (1) Content, (2) Appearance, (3) Promotion, (4) Authors, (5) Politics. These factors cumulatively explained 54,03% of the variance. Also, the internal consistency estimates (Cronbach's alphas α) of sub-scales ranged from .59 to .82. The results of the study showed that there were statistically significant differences between education and facets of authors ($F(5;491)=2,96$; $p \leq .05$) and promotion ($F(5;483)=4,50$; $p \leq .05$). These results were further elaborated and discussed.

their missions well. This situation will broaden the horizon of Physical Education and Sports Schools which are presently more than needed in the country.

The Sports Management Departments of Physical Education and Sports Schools which will fill an important place in our country with the students they educate, do not still have a standard in education. This study was held in Sport Management Department in Akdeniz University. All students in the department were applied a survey and education, instructors, courses and infrastructure of the School was inquired.

As a result, suggestions on student profile, facilities, quality and number of instructors, curriculums, applications, employment are presented by total quality and strategic planning approaches.

P105 Management and Organization

THE POSITION AND THE ROLE OF SPORTS IN RECREATIONAL ACTIVITIES OF STUDENT STUDYING IN PHYSICAL EDUCATION AND SPORTS HIGHER SCHOOLS (EXAMPLE OF ANKARA)

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The aim of this study is to identify the importance and the position of sports in recreational activities of the 3th and 4th grade students from Hacettepe, Gazi, Ankara and Middle East Technical University's physical education and sports department and higher schools with sport science and technology and also to identify the relationship between having recreational activities and demographic properties.

For this purpose, only 3th and 4th grade students accepted as a participant. Stratified method was used to define the number of the students. Total 348 students accepted to compose the sample group of study. The multiple choice questionnaire composed according to the variables defined by researcher was used to collect the data in this study. The questionnaire was applied to the students who study in sports higher education departments.

In questionnaire the multiple choice questions were asked to student to investigate the activities of sports in recreational time. Organized recreational activities and the participation to those activities were considered. The questionnaire to fixate the case composed of two parts. In first part, there is 7 questions and it intended to the personal characteristics of students. There are 20 questions in second part and it intended to the recreational time of students and the evaluation of this period. Questionnaire is composed of total 27 questions. All the analysis were done by using SPSS 10,00 package program. Demographic properties of students and the evaluation of using sports activities in recreational time were given in percentage and frequency and also relationship between these was defined by Cramer's V Test.

Significant relationship ($p < 0,05$) were found between reasons of gender and sports chosen in recreational activities, the amount of time for sports in recreation period and the university

As a result, according to these findings, significant relationship was found between the reasons to choose the recreational activities and gender, universities and the amount of time for recreational activities, the percentage of the using facilities and organized activities in school.

P104 Management and Organization

AN APPLICATION MODEL OF TOTAL QUALITY MANAGEMENT AND STRATEGIC PLANNING FOR SPORTS MANAGEMENT DEPARTMENTS OF THE SCHOOLS OF PHYSICAL EDUCATION AND SPORT

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In this study, total quality management and strategic planning studies will be examined for Physical Education and Sports Schools in Turkey. Also the need of harmonization with rapid changes and developments will be highlighted too.

Physical Education and Sports Schools should take their steps consciously and reliably towards their goals while designating

P106 Management and Organization

A RESEARCH ON NECESSARY QUALIFICATIONS OF SPORTS MANAGER

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The main purpose of this study is to determine the must have qualifications of sports executives who take part in the management of several sports activities and services.

This study includes views of 230 faculty members of Sports Academies, 400 students in Sports Management major, 94 presidents of sports federations and secretaries general, and 40 directors of private sports organizations in Ankara, Turkey.

In order to conduct this study, first related literature was researched, and thus a theoretical base for the study was founded. In this pre-study two different measurements on views of 30 faculty members from Ankara University, Gazi University, Fırat University and Celal Bayar University, 95 post graduate students, 30 directors of sports clubs and 15 secretaries general of sports federations in Ankara were taken. These measurements were taken to test the reliability of the questionnaire and the reliability of the questionnaire was found to be $\alpha = .9609$. In these three sections participants were also asked to provide an order of importance. The final version of the questionnaire was applied on all subjects.

When analyzing data, initially frequencies and percentages of all participants' agree proportions on the qualifications provided in each section were calculated. Furthermore, One Way ANOVA Technique was used. As a result of Variance Analysis, in order to determine which participant group(s) was responsible for the variations in groups' views, Tukey Technique was used.

To conclude, different participant groups which consist of university students, faculty members, presidents and secretaries general of sports federations and directors of sports clubs were found to have quite different views on the must have qualifications of sports executives. However, particularly the following qualifications were found to be regarded as positive and were given preference in the same order by all participants: "Good Communication Skills", "Good Turkish Language Skills", "Good Observation Skills and Knowledge to be able to Analyze Human Behavior", and "To Have a Passion for Working in Sports Management". The following, on the other hand, was regarded as negative and were also given preference in the same order: "To Follow News on Print and Visual Media", "To Routinely Attend Sports related Seminars and Symposiums", and "To Have a Sense of Humor".

P107 Management and Organization

RECREATIONAL ENTERTAINMENT AND GAMES CONCEPTS OF COMMUNITIES LIVING IN TURKEY WITH DIFFERENT CULTURES

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The purpose of this study; to observe the recreational entertainment and game conceptions of communities living in Turkey which have different cultures.

The content of this research is based on people and communities that have different cultural structures living basically Kocaeli, including its near abroad and Diyarbakır.

This research is made up by the help of interviews and books, reviews and web searches given by the people who had participated to interviews.

In conclusion; it is realized that the game and the entertainment forms such as hidrellez, religious festivals, October harvest fests, spring fests and wedding ceremonies, hanky catch, marlinspike & stick, leapfrog, ring game, music, folklore, etc which take part in recreational activities, despite their variable character between different communities, are providing the combination, unity and the continuity of culture transfer in Turkish culture mosaic and take place in different communities as well.

P108 Management and Organization

EFFECTS OF SPORT SPONSORSHIP ON CONSUMERS

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Objective: Despite the growing role of sponsorship in sports area, academic research in this area has been limited in Turkey. Therefore, this research was aimed to examine the effects of consumers' attitudes about 2003 European Volleyball Championship Turkish Women Team's Matches, their perceptions of sponsor-event fit and their attitudes about the sponsor (Orkid) on a multidimensional measure of sponsorship response (interest, favor and use of sponsor's product).

Method: 413 female undergraduate university students with an age from 18-26 participated in the study. Data were collected through Sport Sponsorship Evaluation Questionnaire [2]. Regression, zero order and partial correlations were performed to analyze the data.

Results: The results suggested that sponsor-event fit (SEF), sincerity of sponsor (SS) and interaction of SEF and status of the event (SE) were key factors in generating three levels of sponsorship response in terms of interest, favor and use of sponsor's products. In addition, image of the sponsor (IS), liking the event (LE), interaction of SEF and LE, interaction of SEF and ATS, and interaction of SEF and IS were the significant determinants of sponsor's product use by the consumers.

Conclusion: The implications of these findings for sponsors and event managers were examined and future research directions were outlined.

P109 Management and Organization

DO THE OLYMPICS STILL DISPLAY THE OLYMPIC SPIRIT?

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With the establishment of the International Olympic Committee in 1894 under the presidency of Coubertin to resurrect the ideals of the Ancient Olympic Games, it was intended that the Olympic philosophy would spread throughout the world via sport. But today we see that the Olympics have departed from the universal Olympic spirit. Hans Lenk criticises the Olympics, with their motto for fair-play, in the following way, "The Olympic Games and the Olympic ideal are an integral part of the public face of technocracy, capitalism, fetishism and positivism."

The Olympics have always been affected by political developments. From this it is evident that the first blow to the Olympic ideal was struck by politics. With the development of telecommunications, the influence of the media and the resulting commercial trade in advertising and sponsorship the damage was seriously extended. In the Los Angeles Olympics of 1984 the influence of the media – in particular of television – played a large role in determining the times of the events. Now, in the place of values such as peace, brotherhood and friendship, the Olympics display competitive values such as the overriding will to win, financial gain, and over-competiveness. This has resulted in the Olympic Games becoming more and more distanced from the Olympic Spirit.

P110 Management and Organization

THE ROLE OF THE PLANNING PROCESS IN THE DIMENSION OF OUTDOOR EDUCATION PRACTICE

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The purpose of this study was to analyze and to conclude the role of the planning process in the dimension of outdoor education implementation. According to the results of this study, suggestions and recommendations to make more effective and productive outdoor education programs were aimed.

The method applied in this study was qualitative in nature. The data were collected via observation, interview and document analyses by the principal researcher. Partially structured fieldwork was used as observation techniques. Data were collected by pre-camp and post-camp questionnaires to the participants and their writings for open-ended questions, interviews of administrator, camp leader, scouts leader and participant scouts.

In order to allow the use of triangulation which is a measure of reliability and validity, multiple types of data were collected including field notes, video recordings and photographs. In order to analyse the data; frequency, descriptive and content analyse methods were used. The participant group of this study were; 8 administrators, 10 activity leaders, 5 scout leaders and 10 scouts who were applied interview and also 636 scouts. In this study, demographic characteristics of the outdoor education participants were tried to determine and to analyse the effect of the "basic needs" and "activities" factors in practicing outdoor education program to realize the planning process. As a result; it was found that the "basic needs" and "activities" factors had an important role in the dimension of practicing. In the results of "basic needs" factors analysis showed that; dimensions of cleanliness and hygiene and the number of participants were ignored in planning. According to the results of "activities"; it was found that the number of the participants and the variety and the level of activities had an important role.

P111 Management and Organization

VARIABLES AFFECTING THE PHYSICAL EDUCATION AND SPORTS SCHOOL STUDENTS' DECISION TO ATTEND SPORT GAMES AS A SPECTATOR

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This study is aimed to assess variables that affect the decision of the Physical Education and Sport School students' who are considered as physical education teachers, trainers, and managers of sport organisations in future to attend sport games as a spectator.

The investigation was carried out during the education period of 2003-2004 with 199 students (34 female, 165 male) in the Physical Education and Sports School of Marmara University. The literature concerning sport attendance is reviewed and some personal interviews are done with both some students and some experts in the field. The data obtained from the questionnaire has been constituted at the end of this process. They are explained and interpreted in terms of frequencies, percentages and means in SPSS 11.5 programme.

Findings showed that the sport itself (mean=1.5117), the team which individuals are affiliated with (mean=1.6834), closeness of the game (mean=1.7688) and to watch alive game (mean=1.7688) are the most effective determinants on spectators' decision to attend professional team games.

Consequently it is designated that Physical Education and Sports School students have similar attributes as general spectator profile in Turkey. It is seen that students are interested in to attend their favourite sports and the teams which they affiliated most.

P112 Management and Organization

THE CONTRIBUTIONS OF LOCAL NEWS PAPERS FOR PREVALENT OF SPORT CULTURE

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Purpose: In this research; the aim is to determine the contributions of local news papers which are active in Firat river basin, for prevalent of sport culture.

Method: The survey system has been used for determining the contributions of local news papers for prevalent of sport culture. The research has been made in 13 cities those are in Firat river basin (Erzurum, Ağrı, Erzincan, Sivas, Tunceli, Bingöl, Muş, Elazığ, Malatya, Adıyaman, Şanlıurfa, Gaziantep, Mardin). For the research, the survey with 21 questions which are both opened and closed type have been sent to 128 local news papers' sport reporters, writers and directors via letters. The output results have been checked with SPSS 10.01 software, the meaningful statistical results have been showed on the tables with the distribution of the frequency and percentage.

Results: In the cities which our research have been made in, local news papers show sport only with sport news part, they don't use the social, health, cultural, and economic side of the sport, and it is inspected that this results effect to contributions of news papers for prevalent of sport in negative way. And also, it is seen that the news papers mostly use the soccer, in their sport parts they generally gives news from the local soccer activities, most of the workers of local news papers are men and minority of them have sport education.

Conclusion: In the result of research, a contribution of local news papers in Firat river basin for sport culture is not enough. As an information tool, local news papers have a most important place in the process of social development and civilization, and the works of local news papers with the scientific methods and applications will give more important contribution for the prevalent and development of sport culture, and after this we can say that it can rebuild the social, cultural and economic structures of the public.

P113 Management and Organization

A STUDY OF LEADERSHIP STYLES: PERCEPTIONS OF COLLEGE STUDENTS IN THE UNITED STATES

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Leadership is a crucial component in all aspects of human endeavor, and it is a topic that has generated much interest and been widely studied, yet it remains difficult to define, and even more difficult to explain. Researchers in the world of sport encounter the same challenges of understanding and explaining the universal subtleties that confront all leadership investigations (Chelladurai, 1990). Scientific and systematic studies of leadership style have identified and investigated three classic orientations – the autocratic style, the democratic style, and the laissez-faire approach (Lewin, Lippett, & White, 1939). In the autocratic style, leadership is a command or dictatorial function in which leaders make decisions, develop plans, and direct subordinates. The democratic style, conversely, is participatory, and seeks input and involvement from those on the team or in the organization. And, in the laissez-faire style, leadership is “hands off,” allowing subordinates to work and make decisions independently.

Based on observations, conversations, and experiences in which the author worked with students, teachers, coaches, and sport management personnel, it was believed that people are demanding in their expectations of their leaders, and hypothesized that many individuals tend to focus on negative aspects in leaders and supervisors, rather than positive attributes. This presentation details the procedures and results of a survey conducted among college students in the United States, which serves as a pilot study for future research into relationships regarding leaders and followers.

Results of the survey appear to support the hypothesis that many students would respond negatively regardless of the leadership orientation presented. While there have been many studies on leadership, little has been done regarding the reactions of “followers” to various leadership styles, so additional research of this nature is warranted to substantiate or negate these findings. Furthermore, since this survey utilized a population of American students, similar research in other countries will produce results to provide cross-cultural insights and comparisons.

P114 Management and Organization

THE EVALUATION OF PERFORMANCE POINTS PREPARED BY NATIONAL SPORTS PRESS ABOUT FENERBAHÇE, GALATASARAY AND BEŞİKTAŞ IN 2003-2004 SOCCER SEASON

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Objectives: The purpose of this study is to evaluate the performance points of three well – known, big-three teams, prepared by

national sports presses. Performance evaluation tables prepared by seven different national newspapers coming from different media groups were used.

Methods: As Daily National Sport Press, Fotomaç, Fanatik, Zaman, Radikal, Cumhuriyet, Akşam, and Tercüman have been selected. Turkey has many different media groups and they are mainly interested in soccer. Daily national presses prepare their performance evaluation tables about all of the players in teams including Fenerbahçe, Galatasaray, and Beşiktaş. Points start from 0 to 10, meaning from worst to best. Total scores of the player in the teams give Team Total Score. Data collection was continued during the 2003-2004 soccer season. The data analyzed with SPSS. Descriptive and Inferential statistics were used.

Results: These are the results found in this study:

- There are no significantly difference among the three team based on their Total Team Scores at the end of the 2003-2004 soccer season according to daily national sports press.

- First part of the season, Beşiktaş is significantly difference than the other competitor teams, Fenerbahçe and Galatasaray. For the second part of the season, Fenerbahçe is significantly difference than the Galatasaray and Beşiktaş.

- Even though Galatasaray did not perform well in the first and second parts and whole seasons, it collects the points as much as Fenerbahçe and Beşiktaş collect. This shows that it does not matter which team champions, the national sports press has viewed these three teams equally.

Conclusion: This study shows that national sports presses are not objective, and reliable evaluator on three well-known soccer teams performance evaluation. It has been expected that the performance points given by national sports press help identify the best and worst teams of the season among three teams. It has been expected that Champion team, Fenerbahçe, in 2003-2004 soccer season, should get more attention and receive higher points than the other two teams. However, results shows that there are no significantly difference among three teams on the performance points given. There are many reasons explaining this circumstances but the strongest one could be the marketing strategies of the newspapers.

P115 Management and Organization

SOCIAL FUNCTION OF SPORT CLUBS AS A CIVILIAN SOCIAL ORGANIZATIONS

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The organizations, that are called as Civilian Social Organizations in Turkey, are generally called in Europe as Non Governmental Organization (NGO) or Public Voluntary Organizations (PVO). Civilian public, from now on grows in a way of to become the fundamental structure of civilization. The economical, social, and democratic development of public shows the level of voluntary participation of individuals to the activities for solving their problems. Until the first time Civilian Social Organizations, at the same time are called as third sector, work to make up unity for finding fast and effective solution of problems in the public and for reaching the groups those are inside and outside of these organizations. Civilian Social Organizations are those organizations which are built for giving service to public where the government is not enough and don't work for benefit, and are built by the people who work for one target.

The important part of the needs of public for sport activities and services in civilian life is covered by sport clubs which are the fundamental organization units. Sport Clubs are as Civilian Social Organizations, they contains individuals who have a same idea, they have specialty of giving answers for the needs of public for economic and cultural, because of these, sport clubs have a very important place for civilization of the individuals. Because, Sport clubs are open systems which take some inputs from public, converts it to energy and gives it back to public.

This work explains the sport clubs which are built from public, works for public, believes to government decisions, have aims and targets, as a civilian public organization. To be perceived of Sport clubs those have many functions in the public, as civilian social organization, makes them powerful, and makes them developed for finding solutions to social problems.

P116 Management and Organization

INVESTIGATION OF THE REFEREES UPON LAW KNOWLEDGES IN TURKEY PROFESSIONAL LEAGUE

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In this study was investigated game laws about referee of football which take a due Turkish Professional League. Because the laws of the game are universal, refereeing in Turkey, is trying to catch the improvement point of the world refereeing. The rise in the mistakes of the match officials because of the often changes in the laws of the game, shows there is a lack of importance given to the crucial element of football, that is refereeing. From that point, since 1990 FIFA and IFAB had studied upon these topics. "The Professionalism of Football Referees", "Expert Assistant Referees", "Importance of Referee Education" and "Fourth Official to take place in the laws officially" are some of those studies.

P117 Management and Organization

THE DETERMINATION STUDENT'S PARTICIPATION LEVELS TO RECREATIONAL ACTIVITIES IN UNIVERSITIES OF TURKEY

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The purpose of this study want to analyze the determination student's participation levels to Recreational activities in Universities of Turkey.

At this study seven universities was investigated. To this study (n=1318) subjects that contain students, who participated recreation programs. Study was alone by using survey and research methods and as technique questionnaire was used. After the research of literature that was related with subject, distinct questionnaire was to contain knowledge about identity and activities.

As a statistical procedure percentage, tabulation multiple comparison test were applied.

According to the research's results, it is commonly reached that the following result, university students; first, participate the activities that are organized by university except for activities doing

individual participates; second, are in the university, while participating activities; third, are interested in such activities by means of club and social groups and determine their interest.

P118 Management and Organization

THE DEVELOPMENT OF SPORT INDUSTRY AND ECONOMIC EFFECTS OF SPORT INDUSTRY IN CHANGING WORLD

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This study aims to determine the place of sport industry in different industrial structures in changing world and to emphasize the importance of sport industry for economics.

This study prepare to present a perspective for future basically according to economic effects which is created by sport industry by media and consumption expenditures. Sport industry analyzed by relationship with other sectors and industries in this study. For this analyses, sport industry is evaluated in different countries.

P119 Management and Organization

A JUDICIAL STUDY OF THE LAW PREVENTING VIOLENCE AND DISORDER IN SPORTING COMPETITIONS

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Law number 5149 passed the by Turkish Parliament on 28 April 2004, with the stated aim of preventing violence and disorder in sporting competitions, is long overdue and fills an important judicial gap in the field of sport. The 'European Agreement on Displays of Violence and Excessive Exuberance in Sporting Competitions and Football Matches in particular', published in the Turkish official gazette on 26 August 1990, brought the obligation of making necessary amendments to Turkey as well by laying out a series of general conditions which provided, within the limitations of constitutional law, the foundations and principles for the parties to the agreement. Laws relating to sport in the Turkish Constitution are covered under provisions 58 and 59 in the 'Youth and Sport' section entitled 'Social and Economic Rights and Obligations'. Provision 58 states that the Government will take firm measures to protect the well-being of young people under the country's Sovereignty and Atatürk's Principles and Reforms, and to guard against the development of opinions aimed at removing the indivisible unity of the Turkish nation and her people. Furthermore, the Government will take the necessary precautions to protect youth from alcoholic addiction; addictive substances; delinquency, gambling and similar bad habits; and ignorance.

P120 Management and Organization

CONFLICT MANAGING METHODS OF MANAGERS WITH WORKERS WORKING IN AMATEUR SPORTS FEDERATIONS OF GENERAL MANAGERY OF YOUTH AND SPORT IN TURKEY

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The aim of this study is to determine what conflict style is used by administrators working at all amateur sport federations that belong to General Managery of Youth and Sport in Turkey so as to administer the related conflicts with the staff.

The scope of research is made up of 47 sport federation heads, 47 general secretaries and nearly 100 staff. As a sample, at administrative level (Head of Federations and General Secretary) 47 administrators and 47 staff have been taken. " Questionnaire of Managing Organized Conflict " developed by Ayhan Ural (1997) has been employed as a data collection instrument.

5 options that belong to 5 management styles have been placed randomly in the questionnaire consisting of 25 options towards determining biodata form and behavioristic features.

Frequance of each behavioristic feature has been rated as never, sometimes, usually and always options and scored as never; 1, sometimes; 2, usually; 3 and always ; 4. The validity of the questionnaire is α : .71.11. In data analysis mean, standart deviation, techniques of single-sided variance analysis have been utilized. In conclusion, it has been apparent that administrators working at all amateur sport federations taht belong to General Managery of Youth and Sport, which has a significant role in Turkish Sport Corporation and staff generally employ " problem solving and cooperation style " when facing with conflict.

Moreover, it has been observed that status of the administrators does not constitute a significant variable in terms of conflict management.

P121 Management and Organization

MEASURING SPORT SPONSORSHIP SUCCESS: BASIC THEORIC APPROACHES ABOUT EVALUATION

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Sport sponsorship has become an effective strategy for many corporations and an equally effective revenue producer for sport organizations during the last decades. Sport sponsorship is now being integrated into many company's marketing strategies around the world. There has been a dramatic rise in corporate spending on sport sponsorships in many countries. As the costs of sponsorship continue to increase, the organizations wish to assess the impact of sponsorship.

Sport sponsorship involves the allocation of scarce resources for achieving certain organizational objectives. It has frequently been described in the sport marketing literature as a strategic activity. Sport sponsorship is an investment, in cash or in kind, in an activity, in return for access to the exploitable commercial potential associated with sport activity.

Sport sponsorship must not be confused with other forms corporate giving such as patronage or charity where the motives are altruistic. Sponsor corporations have to follow sponsorship

evaluation process in order to make effective measurement. The main stage of the sport sponsorship process involves evaluation or measurement. This study focuses on measurement techniques of sport sponsorship. There are main methods of measuring sponsorship effectiveness.

1) Measuring the level of media coverage/exposure. The level of media coverage gained as a result of sponsorship involvement is frequently used by sponsors as an indicator of performance. Such evaluation consists of measuring the duration of television coverage and extent of press coverage.

2) Measuring the communication effectiveness of sponsorship involvement. As sponsorship is used to achieve basic communication objectives such as awareness and image, there is a tendency to evaluate sponsorship results in communications rather than sales terms.

3) Measuring the sales effectiveness of sponsorship. Some sponsors can use the sales figures for measuring sport sponsorship effectiveness. If the stated objective is to increase the sales, sponsor can use the method.

4) Monitoring guest feedback. When the objective of sponsorship involvement is the provision of quest hospitality, the monitoring of guest opinions can provide a measure of sponsorship impact.

5) Cost-benefit analysis. If sport sponsorship is an investment, the return of investment can be measure by cost-benefit analysis. A key component in the sponsorship process is the measurement of return on investment.

P122 Management and Organization

THE POTENTIAL CONTRIBUTIONS OF SPONSORSHIP IN THE PROGRESSION OF SPORT EVENTS: THE CASE OF OLYMPIC GAMES

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In advanced societies, sponsorship has appealed as a marketing strategy for the organisations which struggled to meet their objectives due to increased competitiveness. Today, 70 % of sponsorship agreements have been dealt with sport events and organisations. These agreements has provided important contributions to the development of sport. For the success of sponsorship event, quality and quantity of the target audiences are very important. Furthermore, mass media has been carrying an important role for reaching the target audiences. This study discusses how sports events which have been surrounded by the three corner stones –sponsorship, media and target audiences– have been gaining benefits with the direct and indirect contributions of sponsorship in the case of Olympic Games.

P123 Management and Organization

THE VALIDITY AND THE RELIABILITY OF THE TURKISH VERSION OF THE MOTIVATION SCALE FOR SPORT CONSUMPTION

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Objective: The purpose of this study was to measure the validity and the reliability of the Turkish version of the Motivation Scale for Sport Consumption "MSSC" developed by G. Trail, and J. James (1995).

Methods: Subjects: 97 participants filled out the scale in the soccer game played between Gençlerbirliği and Samsunspor in Ankara. Mean age of the participants was 36.2 (14.4), and majority of the participants were high school graduates (44 %).

Scale: The M.S.S.C. included 21 items under 7 factors. In addition to the 21 items the 7 point scale also included one question to measure the participants' level of identification with the team they supported, and two questions about how often the supporter watch the team's games.

Statistical Analysis: In order to measure the construct validity of the scale, factor analysis was applied to the data. Average variance explained (AVE) values were calculated to measure the convergent validity of the scale, and Cronbach's alpha coefficients were calculated to ascertain the internal consistency and the reliability of the instrument.

Results: Cronbach's alpha coefficients represented each factor's internal consistency. The alpha for the overall scale was 0.91. All of the factors surpass the 0.70 cut-off point for the reliability. The alpha coefficients of the factors ranged between 0.83 (Beauty of the Sport) to 0.94 (Escape from daily routine). The alpha coefficients showed similarity with the original version of the scale.

Factor analysis results showed that 21 items were loaded under 7 factors as it is in the original version explaining nearly 80 % of the total variance. The discriminant validity of the scale was determined by calculating the squares of the each correlation between the 7 factors. None of the squared correlations exceeded the AVE values indicating that the discrimination power of the scale was acceptable.

Conclusion: The results of the study indicated that the Turkish version of the M.S.S.C. possesses the psychometric properties to accurately and reliably measure the underlying factors that motivate sport consumers to attend sport events.

P124 Management and Organization

TV AND FOOTBALL

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Football is the most popular sport in the world. There might be several things to be said on TV-football relations. The very first of TV- football relationship started with the 1954 World Cup organised in Switzerland. The most attractive side of football for TV is the advertisement being extraordinary expensive shown during the games. Another feature of TV football is the magazine side which the more attention is paid on. Such phenomenon results in players becoming stars and their lives becoming the subject of the magazine world. Another result of TV- football relations is that football becomes more massive through TV turning to be a narrow stadium and such massive being used as a means of commerce and investment. Another result of TV-football relations is that it attracts the competition and cause the blessing of capitalist values. The consumption culture and ideology are easily vaccinated to wide crowds. The private coded canals resulted in second exploitation of audience. TV football is a man-made speculated reality. The sight through TV is as the capture capacity of camera. Another element of TV football is sponsorship.

The results become important but the process in TV football.

Since TV is an important argument of economical income of TV companies, the football clubs are to be managed by either media bosses or mafia leaders which contradicts with the origin sound of the sport namely "starting equality" of football and generally sports.

P125 Management and Organization

HOW TURKISH WOMEN VOLLEYBALL TEAM GAMES IN WORLD CUP 2003 WERE CONVEYED IN TURKISH NEWSPAPER AND ITALY AS AN EXAMPLE

* Cem Cetin

* Kocaeli University

Sport section of Turkish newspapers pay special attention to sport games and news about football as if sport only means football. The goal of this article is therefore to point out how much attention the other sports is given or not given in terms of quality and quantity news in newspapers. In order to claim this, we have observed how Turkish Women Volleyball National Team's 11 games during the World Cup in Japan were conveyed in the published media. This study was based on four different large newspapers (Hurriyet, Milliyet, Sabah and Vatan) and two sports newspapers (Fanatik and Fotomac). Another goal of this study is to show if there was a difference in information flow between regular and sport newspapers. In addition, we have studied Italian sport media, a country whose team also participated to in the world cup like Turkey, to compare Turkish and Italian sport journalism. For this study we have used Gazette della Sport which owns titles like "the oldest" and "the most popular" and celebrated its 100th birthday in 1996.

P126 Management and Organization

THE OUTSOURCING APPLICATIONS FOR THE TRAVEL ORGANISATIONS OF THE SPORT CLUBS

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Nowadays, the sports clubs which are active in various sports branches, have started to perform the travel organization plans for both national and international games, through the intermediation of travel agencies. It is an important indicator in the name of increasing the prevalence of outsourcing applications that each team negotiating with a travel agency and transferring the organizational activities to agencies regarding the sports games in the sport management.

The aim of this work, a questionnaire; which has prepared for 28 sports clubs struggle the super league the branches of volleyball, basketball, ant football in Istanbul province just for determining the positive and negative sides of being widespread of the applications from foreign sources in the travel organizations of sports clubs; has been applied. The answers of the clubs which entered the questionnaire work has been evaluated up-to frequency analysis.

Consequently, one of the primary objectives of sports club is to provide the players (sportsman) and the technical staff in time and in the correct place. But this is not the field they are specialized. In order to reach to success, the coordination of the sportsman travel and accommodation in comfort could be provided by travel coordinators or it can be transferred to a separate travel agencies. It has been seen that; the 22 of the 28 sports clubs entered the questionnaire; benefited from the travel agencies for the services of camps, away, and transportation. It has been established that experience is the biggest factor to choose the agency and the importance of expertise is more than the cost price. The most important development appeared till to start working together with travel agencies, it is determined that the increasing quality in the organizations.

P127 Management and Organization

AN INVESTIGATION ABOUT AGGRESIVENESS KIND OF FOOTBALL TRAINERS

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The aim of this study is to determine types of aggressiveness of sportsmen who work as football coaches, to analyze their point of view about aggressiveness and to give suggestions.

The scope of this survey involves total 2180 football trainers who participated in the "Regional Seminar on Development of Football Trainers" held in 41 cities by the cooperation between Turkish Football Association and Turkish Football Coaches Foundation. The respondents are 472 persons casually chosen among the members, between 21-46 years old, of Turkish Football Coaches Foundation in the 41 cities where the seminars were held (Ankara, Bolu, Diyarbakır, Isparta, Kayseri, Kırşehir, Konya, Mersin, İstanbul, Şanlıurfa, Trabzon, and Van).

Firstly, in the survey, already existing data related to the issue were collected systematically from the relevant literature and evaluated so as to form a conceptual framework as regards the issue. In the second part, to be tested by Ilter Kiper Inventory Marks of Aggressiveness were applied to football trainers. For each sub-test value of the data obtained, arithmetic average, and standard deviations were calculated. Whether Inventory Marks of Aggressiveness were different among the groups was tested through Independent T-Test and the difference between the marks of the sorts of aggressiveness for both groups was tested through One-way Anova/Tukey and it was checked whether the findings corresponded to $P < 0.05$ significance level.

As a result of the t-test applied, no meaningful difference could be found between the scores of "active" and "destructive" aggressiveness related to the technical directors and the coaches in license A but a meaningful relationship was observed between the scores of "passive" aggressiveness.

As a result of the comparison between the coaches in license B and amateur trainers, no meaningful difference could be found between the scores of "active" and "passive" aggressiveness. It was observed that the coaches in license B had much more destructive aggressiveness than amateur trainers.

As a consequence, according to the sorts of aggressiveness of the football coaches working in Turkey, it has been observed that the coaches in license A are "Passive", and those in license B are "destructive". It has been established that no meaningful difference exists statistically between "active" behavioral characteristics of the coach groups.

P128 Management and Organization

PARLIAMENTARIANS' OPINIONS ABOUT PROBLEMS OF TURKISH SPORT

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The purpose of this study was to find out the parliamentarians' ideas about problems of Turkish sport and find advices about this subject.

The population of the study was being from 22nd term all parliamentarians of Turkish Parliament. Also sampling was taken from voluntaries 120 parliamentarians.

In this study; percentage and frequency values are taken, also for some questions crosstables had drawn. For evaluation the datas and finding calculated values SPSS for Windows (11.0) static package program had used.

As a result of this study, parlamentarians said that the sport facilities are not enough, they must be widespreaded to serve al society, they also declerated, that television channels should make programmes that facialitate to introduce and widespread the sports. By the way, law makers don't satisfaction by making law, they have to force to practice those laws, it can be said that makes more healty structure in sport.

P129 Management and Organization

USING EFFICIENCY OF SPORT PLANTS IN ELAZIG CITY CENTER

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* Firat University, School of Physical Education and Sports

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In this study whole of the sport plants of Elazığ city center (5 of them belongs to Youth & Sports City Directorate, 10 of them belongs to intermediate education associations, 9 of them belongs to public associations and 12 of them belongs to special sector) was covered.

By examining the sport plants, the questionnaire which prepared before inquiry, it was applied by using face to face interview to administrators and educators working in sport plants. Data's after evaluating questionnaires gave with benefit from basic statistical processes.

Sport plants which are in Elazığ city center % 13.8 of them in Youth & Sports Directorate, % 27.7 of them in intermediate education associations, % 25 of them in public associations and % 33 of them in special sector and they are at service average 11.6 hours a day. Sport plants found inefficient about variety. In this inquiry administrators told the main clause of closing sport plants out working hours is no request for them.

As a result administrating the sport plants in Elazığ city centre far away from sport administration and not to be open the sport plants to people caused to be lack of efficiency expecting from sport plants.

P130 Movements and Training

TO COMPARE THE MOTOR PROFILE OF THE MILITARY ACADEMY FRESHMEN OF TWO DIFFERENT BACKGROUNDS

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The present reserch aims to compare the motor profile of the Military Academy freshmen of two different backgrounds. Each group consists of 20 cadets. One comprises graduated of military high schools whereas the other freshmen group have graduated from either private or government high schools. The measurements have been conducted at the sport facilities and the infirmary located on the campus of the Academy.

In this study, the data has been obtained through the following test and measurements: the averages of age, height and weight; the squad jump (SS), Active Jump (AS), 15-second multiple jump, Max.VO₂, flexibility, 10m. And 30m run.

The average age of ASLKÖ, 19,05±0.82 years, the average of SVLKÖ 19,05±0.51 years. The average of height of ASLKÖ 174,4±6,06 cm, the average of height of SVLKÖ 175,27±5,34 cm. The average of weight of ASLKÖ 65,91±4,16 kg, the average of weight of SVLKÖ 68,89±6,45 kg.

As a result, the measurements regarding the averages of age, height, weight; SS, AS, 15-second multiple jump, 10m. and 30m. run yielded no (p>0,05). However, statistically significant differences between the two groups with respect to Max. VO₂, flexibility significant differences have been recorded (p<0,05).

P131 Movements and Training

DEVELOPING REGRESSION FORMULAS USING DEXA AS A CRITERION METHOD FOR SEDENTARY WOMEN BETWEEN 40 AND 55 YEARS

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¹ METU, Medical Center

The present study aims at developing regression formulas and examining body composition of sedentary women between the ages of 40-55 yrs. Forty-seven women (46.66 ± 3.52 yrs) were participated the study. Body composition parameters were measured by DEXA and Holtain Skinfold Caliper. Dual Energy X-Ray Absorptiometry (DEXA) (Lunar DPX Dual X-Ray Absorptiometry) was used to measure percent body fat percentage by total body scan. Skinfold measurement were taken at nine skinfold sites (chest, midaxilla, triceps, subscapula, abdomen, suprailium, thigh, biceps, and calf). Descriptive statistics of skinfold thickness were calculated for sedentary women. To develop regression formulas DEXA was used as a criterion method. Two regression formulas were developed to predict the DEXA fat percentage by using the skinfold thickness.

F.1: % Body Fat = -1.777 + .761BMI + .499thigh + .177chest
(R²=0.88 and SEE=2.348)

F.2: % Body Fat = -1.564 + .761BMI + .471thigh + .157abdomen
(R²=0.86 and SEE=2.486)

Due to the difficulty of the taking chest measurement from the women, second formula was developed by extracting the chest variables.

For the statistical analysis, SPSS 10.0 package program was used. Stepwise Multiple Regression Analysis was used to develop the formulas.

P132 Movements and Training

THE COMPARISON OF REACTION TIMES AND GRIP STRENGTH OF ELITE MALE GYMNASTS AND SEDANTER INDIVIDUALS IN TURKEY

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The purpose of this study is to compare reaction time and grip strength of elite male gymnasts and sedentary individuals in Tur-

key. The data were obtained from 9 male gymnasts and 9 male sedentary subjects (N=18). The Man Whitney U test was used to compare the groups. Alpha set at p< 0.5. The results showed that there was a significant difference in reaction time and left and right grip strength for gymnasts only (p<0.05). However, there were no significant differences in test results (p>0.05) for visual and audio reaction time parameters. These results indicate that male gymnasts have much more better reaction time and this could be related to their heights and weights.

P133 Movements and Training

PULMONARY FUNCTION TEST VALUES OF REGULAR BASKETBALL PRACTICES OF CHILDREN OF 8-12 YEARS

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Exercise has an important role on physical development of children. It is accepted that pulmonary capacity of the people doing sports regularly is higher than sedentary people of the same age group, height and weight.

Tablo 1: Basketbolcu ve sedanter çocukların ortalama değerlerinin karşılaştırılması

	Grup1 Basketbolcu (n:30)	Grup2 Sedanter (n:30)
YAŞ (YIL) X± SD	10,77±1,10	10,10±1,25
BOY (CM) X± SD	149,43±8,11	136,27±5,61
VÜCUT AĞIRLIĞI(KG) X± SD	39,20±7,39	29,30±2,87

The aim of this study is to compare respiratory functions of children of the age group of 8-12 years, doing regular basketball practices with the children of the same age group doing no sports activities.

In this study, pulmonary function tests were done on 30 male children playing basketball and 30 male sedentary children, considering height, weight and age.

The records were assessed according to P>0,05 statistical significance levels in student's t test.

The average age of the children playing basketball is 10,77 ± 0,20 year, height average is 149,43±1,48 cm, body, and weight is 39,20 ± 1,35 kg. The age average of children doing no sports activities is 10,10 ± 0,21 years, height average is 136,27 ± 1,02 cm, and body weight is 29,30 ± 0,52 kg.

In this study Forced Vital Capacity (FVC), Forced Expiratory Volume (FEV) and Vital Capacity (VC), Maksimum Voluntary Ventilation (MVV) are recorded to be higher than the sedentary children (P<0,05)

The results indicate that basketball has a considerable effect on enhancing respiratory functions of an individual, and the reason is that after basketball practices respiratory muscles develop and strengthen.

P134 Movements and Training

THE ENERGY WHICH IS EXPENDED DURING DIFFERENT EXERCISE TESTS AND BODY COMPOSITION

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In this study all the tests and measurement performed on 38 male students who were getting ready for the Akdeniz University School of Education Physical and sports entrance examination. The students Average ages were 19.21 ± 1.5 , average Weights were 66.6 ± 7.82 kg, the heights were 175.5 ± 6.62 cm.

Endurance Shuttle Run test and Wingate Anaerobic power tests were performed to determine the energy which was expended. Anthropometric measurements were used to determine somatotype values, BMI, LBW and FAT %.

The results of the statistical analysis which was applied to all the relation between the energy expended during aerobic power test and LBW ($r=0.693$, $p<0.01$) and AGE ($r=0.377$, $p<0.05$); a negative relation between the energy during aerobic power test and ECT ($r=-0.336$, $p<0.05$).

There is a negative relation between the energy expended during anaerobic power test and FI ($r=-0.680$, $p<0.01$) and ECT ($r=-0.324$, $p<0.05$), a positive relation between the energy expended during anaerobic power test and LBW ($r=0.327$, $p<0.05$).

At the end of the study, it was determined that, somatotype (EKT) effects the performance in a great deal, FAT % effects the performance negatively. And it's determined that BMI is effective on long lasting aerobic tests but it is not effective on short lasting anaerobic tests. In the two tests it is determined that LBW effects the expended energy.

P135 Movements and Training

BODY COMPOSITION AND ANTHROPOMETRIC MEASUREMENTS IN PROFESSIONAL BALLET DANCERS

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Objective: Ballet training begins at a young age and much of it takes place during adolescence. To maintain thinness, dancers often minimize their caloric intake. The purpose of this study was to describe the body composition and anthropometric measurements of ballet dancers.

Methods: The percent body fat of 58 professional dancers from the Istanbul State Opera and Ballet was estimated by using skinfold measurements (Holtain Ltd.) at seven sites: triceps, subscapula, midaxilla, chest, abdomen, suprailiac, thigh. The average age was 33,7 years . 34,4 (21-58) years for men and 33,3 (21-56) years for women. The average height was 169,6 cm. 175,6 cm for men and 165,7 cm for women. The average weight was 60,9 kg. 72,7 kg for men and 53,3 kg for women.

Results: The percent body fat was found 13,1% in female and 7,1% in male active ballet dancers.

Conclusion: The body weight and the percent body fat is lower in ballet dancers than the general population. Dancers should be educated about nutrition and cautioned regarding poor eating habits, because the physical requirements of ballet are considerable. Poor nutrition and excessive dieting can lead to a dangerous loss of energy.

P136 Movements and Training

TO COMPARE THE BLOOD PROFILE OF THE MILITARY ACADEMY FRESHMEN OF TWO DIFFERENT BACKGROUNDS

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The present research aims to compare the blood profile of the Military Academy freshmen of two different backgrounds. Each group consists of 20 cadets. One comprises graduates of military high schools whereas the other freshmen groups have graduated from either private or government high schools. The measurements and tests have been conducted at the sport facilities and the infirmary located on the campus of the Academy.

In this study, the data has been obtained through the following tests and measurements: the averages of age, height, weight and blood parameter; Cholesterol, Triglycerides, Low-Density Lipoprotein, High-Density Lipoprotein, Hemoglobin, Hemotocrit. Low-Density Lipoprotein, Hemoglobin and Hemotocrit statistically significant differences have been recorded ($p<0,05$).

P137 Movements and Training

RESEARCH ABOUT THE EFFECT OF ISOKINETIC FORCE ON SPRINT SPEED IN YOUNG SOCCER PLAYERS

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To research the relation between isokinetic knee power and sprint speed in young male soccer players, 51 young volunteer players were taken as test subjects. Their average age was $\bar{X} = 18.220 \pm 1.190$ years, average height was $\bar{X} = 177.675 \pm 6,616$ cm, average body weight was $\bar{X} = 69.539 \pm 7,199$ kg. and they were playing in Candidates for Professional Soccer (PAF) teams of three professional clubs in Istanbul in season 2003-2004. These players have been playing soccer at least for five years, they were regularly training for 4-5 times a week, playing a league match once a week, and they have not been exposed to any injury short period before the tests.

Soccer players in the test group were subject to sprint test and isokinetic tests besides normal training and league matches. Newest Powertimer System device was used for sprint speed test, and Cybex Extremity System 340 device was used for isokinetic power test. The players' sprint times were measured for 0-3, 0-10, 0-20, 0-30, 0-40 meters. For isokinetic knee power measurement, peak tork values for flexion and extension were measured for both knees and peak values' percentage according to body weight (BW%) and total work were calculated.

As a result of statistical evaluations, sprint times relations between each other were found significantly high. Especially the relations between sprint times in 0-20, 0-30, 0-40 meters were very high and depending upon that high relation, it can be said that players' sprint times can be defined by their sprint times in 0-20, 0-30 meters.

Regarding relations between isokinetic tests and sprint times, significant relations were only found between 0-3 meter sprint time and peak power in left knee extension 300o/sec. With these results, it is not much possible to say that isokinetic knee power is the determinant of sprint speed. Thus, isokinetic power training is not enough in improving soccer players' sprint times, additional training techniques are needed.

P138 **Movements and Training**

COMPARISON OF STRESS HORMONE LEVELS AND RELATIONSHIP WITH IMMUNOLOGICAL PARAMETERS OF THE PROFESSIONAL BASKETBALL PLAYERS AND CYCLISTS DURING THE TRAINING PERIOD

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Introduction: The mechanism(s) that underlying exercise-induced immune alterations is multifactorial. The relationship between in circulating leukocyte subsets and hormone concentrations such as Epi, NE, GH, and Cortisol largely parallels. Induction of hormone secretion is associated with the magnitude of exercise induced increases in core temperature.

Methods: Eleven professional basketball players (Who mean training age $11,08 \pm 4,75$ years) and ten professional cyclists (Who mean training age $6,02 \pm 3,78$ years) volunteered for study. Peripheral venous blood samples were drawn after training.

Hematological analyses: Total erythrocyte, leukocyte numbers, Hb and Hematocrit were performed with coulter hematology analyzer. Determination of lymphocyte subpopulations (CD3+, CD4+, CD19+, CD45+) was performed by flowcytometry.

Hormonal analyses: Growth hormone and Cortisol concentrations were determined by radioimmunoassay kits.

Statistical analyses: Significance of changes in leukocyte subsets and stress hormones were analysed paired t test. Associations between cell counts and hormone levels were analysed by using pearson correlation.

Results: In professional basketball players Hb and Hct values were higher than the cyclists. Total leukocyte number and granulocyte rate were high in the basketball players and lymphocyte and monocyte rate were high in the cyclists.

Growth hormone and Cortisol levels were high in the cyclists. CD4+ Thelper/inducer cell numbers were significantly high in the basketball players although CD19+ B cells numbers were high in the cyclists. There were no significant differences in CD3+ total T cells numbers in two groups.

Discussion: We previously found that, Growth hormone and Cortisol levels and CD3+, CD4+, CD19+ cell numbers were in the normal reference values both cyclists and basketball players. However in the basketball players we determined that, stress hormones levels were significantly lower than cyclists. CD4+ cell numbers were high in the basketball players, and CD19+ cell numbers were high in the cyclists.

P139 **Movements and Training**

POSTURAL ANALYSIS IN PROFESSIONAL BALLET DANCERS

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Objective: Classical ballet training which starts in early childhood has certain effects on the musculoskeletal system and body posture. The purpose of this study was to determine postural faults in professional ballet dancers.

Methods: Postural analysis of 58 professional dancers from the İstanbul State Opera and Ballet were made from the lateral, anterior and posterior view.

Results: Flat foot was found more common than cavus foot. Both flat foot and cavus foot were more common in male dancers than female dancers. Genu recurvatum was found 34,5% in the right knee and 43,1% in the left knee. Anterior pelvic tilt was found 24,1% and posterior pelvic tilt was found 3,4%. Hallux valgus was found 72,4% in the right foot and 77,6% in the left foot. Genu varum was found more common in male dancers than female dancers. Scoliosis was found 32,3% in female and 12,5% in male dancers.

Conclusion: Classical ballet training causes significant changes in the body posture of the dancers.

P140 **Movements and Training**

INVESTIGATION OF ANAEROBIC POWER AND CAPACITY PERFORMANCE AT FIELD AND LABORATORY CONDITION IN ELITE TENNIS PLAYERS

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The aim of this research to investigate the anaerobic performances (23.3 ± 5.7 age, 71.7 ± 10.5 kg body mass and 177.7 ± 6.7 cm height) of eight elite tennis athlete. Sit and reach test, vertical jump test, hexagon test, 20 yard run test, sideways run test and Wingate anaerobic power and capacity test were performed. Data were analysis with SPSS 10.0 statistic program, descriptive statistics and Spearman correlation analysis were performed, the $p < .01$ and $p < .05$ significant value was used. Findings of the research were; sit and reach test 12.1 ± 7.3 cm, vertical jump test 58.8 ± 12.5 cm, hexagon test 11.7 ± 0.6 sec, 20 yard run test 2.9 ± 0.1 sec, sideways run test 5.8 ± 0.4 sec, peak power 11.93 ± 1.09 W/kg, minimum power 5.76 ± 0.81 W/kg and average power 8.33 ± 0.51 W/kg determined. At conclusion; for talent identification in tennis the height and flexibility parameters were investigate for positive effect to anaerobic performance.

P141 Movements and Training

INVESTIGATION OF CORRELATION BETWEEN SPIROMETRIC RESPIRATORY FUNCTIONS AND 30 SECONDS WINGATE TEST PERFORMANCE IN YOUNG SUBJECT

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Objective: This work has been planned to investigate whether the correlation between one of the important component of the sports performance respiratory function and 30 seconds Wingate Test (WT) parameters of young girls and boys who have different physical fitness or not.

Methods: This work included a total of 166 subjects those are 98 young boys (20.30±1.93) and 68 young girls (19.65±2.18). The subjects were divided into two groups namely regular exercises group (EG) who make a regular exercises during 4.0±1.50 years and sedentary groups (SG). Both group's subjects have similar age, height, weight and body mass index (BMI kg/m²). Statistical analyses were performed by SPSS computer program and the groups were compared to each other by using Independent Samples t test calculation and the correlation relation levels were calculated by using linear regression analysis.

Results: In the view of physical peculiarities, it has not been found any difference between research groups that EG and SG (p>0.05). In the meaning of the measured spirometric respiration functions and WT power performance, with the advantage of making regular sports, according to SG groups, the boys and girls EG groups showed differences (p<0.05). The correlational relationship between the spirometric and WT power parameters; it has been observed significant correlation between peak power (PP), mean power (MP), peak power/weight (PP/Wkg), mean power/weight (MP/Wkg) form WT parameters and VC, FVC, FEV1, FEV1/FVC (%), FEF25-75, PEF and MVV form respiration function (p<0.05 and p<0.001). On the other hand, it has not been found any significant correlation between WT anaerobic fatigue index (AFI %) and respiration functions (p<0.05).

Conclusion: In this work, the tested spirometric respiration functions have got an active role in the WT power parameters. It has been confirmed that there is a positive tendency significant higher correlation between VC, FVC, FEV1, FEV1/FVC (%), FEF25-75, PEF, MVV and WT parameters in both antrene and non-antrene groups.

P142 Movements and Training

THE CHARACTERISTICS OF PHYSICAL AND ANTROPOMETRIC DEVELOPMENT OF KINDERGARDEN CHILDREN, A YEAR PILOT STUDY

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The aim of study was to evaluate the characteristics of physical and antropometric development in a year at kindergarden at the age of 4-7 years old preschool children, pilot study. In this research, 60 subjects are randomly selected at the kindergarden the age of 4-7 year old.

Pre-test are practiced at study group, after a year post-test are practiced. Antropometrics (lenght, diameter, skinfold, circumference, arm span and sitting height) of the all subjets are meas-

ured in this research. At the end of measurement, all gathered data were analysed in SPSS for Windows. Descriptive statistics and paired samples T Test were used in statistical analysis.

As a result of at the end of the statistical analysis, some values of study group were found significant between the pre-test and post-test measurement as physical, diameter and circumference parameters (p<001). In the antropometric measures, skinfold, supscapula, biceps, abdominal, thigh and calf were found significant at p<001. Chest and triceps were found significant at p<005.

P143 Movements and Training

EVALUATION OF THE REACTION TIMES OF THE MALE ATHLETES IN TURKISH NATIONAL ARTISTIC GYMNASTIC TEAM

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In this study, the height, weight and visual and audial reaction times of 11 male gymnasts at an average age of 22.90±2.70 years and 11 males that do not do sports at an average age of 21.36±2.11 were compared.

According to the results, the height and the weight of the gymnasts were found to be lower than those of the control group and as a result of a statistical analysis, while statistical difference (p<0.05) was observed in the height, no statistical difference (p>0.05) was observed in the weight. It was found that the visual and audial reaction time of the gymnasts was shorter than that of the other young males in the control group. It was also observed that there exists a statistical difference (p<0.05) between the visual reaction test results, whereas there was no statistical difference (p>0.05) between the audial reaction test results.

P144 Movements and Training

TRAUMA INCIDENCE OF ELITE TAEKWONDO ATHLETES, PREVENTIVE MEASURES AND FORENSIC ASPECTS

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Background: Although taekwondo is the second most popular sports modality in Turkey, it was not investigated in terms of trauma risk. Besides, it was necessary to question, the athletes awareness of preventive measures and forensic aspects.

Hypothesis: Taekwondo is a high risk contact sport, which can lead to severe trauma or death. More protective measures are necessary.

Study Design: Questionnaires

Methods: Ninety elite taekwondo athletes were interviewed during the 2004 Turkish Championships of Taekwondo. A multidisciplinary study was performed via questionnaires. The serious orofacial injury risk and use of mouth protectors were investigated by dentists; serious orthopedic injuries were evaluated by sports physicians and awareness of forensic aspects by a specialist of forensic medicine. The aim of the study was to investigate the athletes in terms of severe trauma incidence, use of protectors against trauma and awareness of forensic aspects.

Results: None of the interviewees had witnessed a death case of any taekwondo athlete. However, experienced serious trauma rates were considerably high in lower extremity (49.88%) orofacial (31.11%), and upper extremity (9.99%) regions of the body. All of the athletes were using some compulsory protectors. However, only 10% of them were using mouthguards voluntarily. Athletes' knowledge about sports law was limited and 66.7% of them had a tendency to street fights.



Image from Athens 2004

Conclusions: Taekwondo is a high risk sport in terms of serious trauma. More protective measures should be taken with additional devices and/or change of rules. Furthermore, the insufficient awareness of sports law and a tendency to street fight have to be reduced with educational precautions.

P145 **Movements and Training**

THE EVALUATION RELATIONSHIP BETWEEN SOME ANTHROPOMETRIC CHARACTERISTICS AND PERFORMANCE RELATED PHYSICAL FITNESS TEST RESULTS IN CHILDREN ATHLETES

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The aim of this study was to investigate the relationship between some anthropometric characteristics and performance-related physical fitness parameters in children athletes.

The subjects were 52 boys and 43 girls (11-13 years old) who were trained between 6 months to 1,5 years after the talent identification from total 4041 children. To investigate the anthropometric characteristics of subjects, weight, height, skinfold, body part diameters, circumferences and lengths measurements were taken and somatotypes were determined. The performance-related physical fitness tests were 30 m sprint, sit and reach, 1 minute sit-up, 1 kg medicine ball throw, standing jump, left and right hand grip and 1 mile run. Independent Samples T-Test analysis were used to determine differences between genders groups. Pearson Correlation Coefficient Analysis were used to determine the relation between the anthropometric characteristics and performance-related physical fitness test scores.

Particularly in both sex, it was determined that significant positive relationships; between 30 m agility run performances with age, biacromial breadth (BAB), sitting height (SH) and arm span (AS); between 1 kg medicine ball throw performances with age, height, weight, body mass index (BMI), biliacristal breadth (BIB) and body part lengths measurements; between standing long jump performances with entire leg length (LL), AS and entire arm length (AL); between left and right hand grip performances with age, height, weight, BMI, femur breadth, calf girth, BAB, BIB, SH, LL, AS, and AL. In addition, significant negative relationships were found for children athletes between 1 mile run performances with weight, sum of skinfold, percentage body fat and BMI values ($p < .05$).

The results indicate that the generally low to high positive relationships were found for children athletes between their body part diameters, circumferences and lengths measurements with agility, power and strength performances. However relationship between percentage body fat, BMI and sum of skinfolds with cardiovascular endurance performances were low negative. In conclusion, physical fitness test performances were effected to similar positive or negative from their anthropometric characteristics in athlete boys and girls (10-13 years old).

P146 **Movements and Training**

COMPETITION TECHNIQUE ANALYSIS OF 48. EUROPEAN GRECO-ROMAN WRESTLING CHAMPIONSHIP

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Purpose: The aim of this study was to analyze the competitions in 48. European Greco-Roman Championship, in view of general, classification and Turkish Wrestlers and determine active criterions in accomplishment. The Greco-Roman Style Wrestling Championship was in İstanbul at 2001.

Method: 233 Greco-Roman Style competitions in 48. European Greco-Roman Championship were recorded by video, and these records were analyzed. The way of winnings, the finishing times, the technique numbers, the points and the passivity numbers of the whole competitions; the techniques that the Turkish Team exposed to and applied were presented as mean and percentage.

Findings: The most using techniques was found as respectively gut wrench, supless and takedown by waist tackle. On the other hand, ratio of gut wrench of Turkey and Russia are higher than general means (respectively %34.48 and %37,64). It's demonstrated that Turkish Wrestlers took the most points by tying salto than foreign wrestlers take points. It's found that Turkish wrestlers took a least passivity point, according to the group of classifying. The most of matches keep on 6. minutes. It's found that Turkish wrestlers's ratio of winings with tech-

nical superiority is higher than other teams. The most used techingues by wrestlers is one point techniques. The two points techniques followed it. In the greco-roman wrestling, were taken total 1614 points with 1014 techniques, therefore mean of total points was 6.93 per match. During the whole of matches Turkish wrestlers took 4.94 points, while they gave 1.34 points. Although given by Turkish wrestlers, passivity points is 0.94 ratio, given by other wrestlers, passivity points was ratio of 1.41. It's found that the total numbers of tech-nigues per match were 4.35 ratio. Nevertheless, this numbers were 3.37 ratio in classifying matches.

Results: The most used techniques in comepetition by wrestlers were gut wrench, supless an takedown by waist tackle. The Turkish Team was be successful, because it took a lot of points from passivity points and crotch lift techniques than other teams.

P147 **Movements and Training**

THE INVESTIGATION OF CHANGING OF SOME BLOOD PARAMETERS OF ELITE CYCLISTS DURING THE RACE AND SOME OF THEIR MOTORICAL QUALIFICATIONS

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The aim of this study was to investigate the changing of some blood parameters of elite cyclists during the race and to determine some of their motorical qualifications.

Data were collected via measurements of eight athletes of Brisa Sport Young Man Cycling Team. Data had been analyzed using Mann-Whitney U and Pearson correlation tests with SPSS 7,5 statistic program for Windows.

According to the result showed that there is a significant difference between pre and post test on hemoglobin level ($F:0,021$ $p<0,05^*$); and there is no significant differences between the other parameteres. There was no literature found related to the subject in addition to this; it can be considered that; in order to obtain the needed O₂ metabolism; Spleen's support to blood circulation can be effective.

P148 **Movements and Training**

THE EFFECTS OF AROUSAL LEVEL ON REACTION TIME OF THE EIGHT-YEAR OLD CHILDREN IN KARATE

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The purpose of this study was to determine the effects of arousal level on reaction time of the eight-year old children in karate. The subjects were ten (N=10) volunteer male children. The average age of subjects was 8±0.

Subjects' optimal, low and high level of arousal were measured via heart rate, blood pressure and, reaction time parameters. A relaxation exercise scenario was applied as an intervention. The data analyzed via an SPSS statistical package using Wilcoxon and Friedman tests.

The results of this study indicated that there was no significant difference on auditory reaction time ($p>0,05$). However, the low level of arousal had a positive effect on visual reaction time ($p<0,05$). Consequently, findings of this study suggest that the level of low arousal has an effect on visual reaction time of eight year-old male children in karate.

P149 **Movements and Training**

COMPARISON OF THE EFFECTS OF PLYOMETRIC TRAININGS ON ATHLETES WHO HAVE DIFFERENT ANAEROBIC POWER

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Objective: The aim of this study is to compare the effects of plyometric trainings on athletes with different anaerobic powers and to use the attained results in increasing the performances of athletes.

Methods: During the study, 44 male students of Trakya University School of Physical Education and Sports were used as test subjects. Body weight and vertical jump distances of the subjects were used in the formula of anaerobic power [$(\sqrt{4.9}(\text{Body Weight}) \sqrt{D})$], and according to the results, the students were divided into two groups, one of which is the group with high anaerobic power and the other is the group with low anaerobic power. The same plyometric training program was applied to both groups 3 days a week, for 12 weeks. During the measurements of pre and post test, body weight, right-left hand auditory and visual reaction times, vital capacity, strength of leg and back, anaerobic power, vertical jump and long jump after stopping tests were conducted. For the statistical evaluation, Kolmogorov Simirnov and T-test were used.

Results: During the pre-test, an anaerobic power difference of $p=0,000$ was determined between the two groups. As a result of plyometric trainings, in the group with high anaerobic power, a reasonable difference was determined between pre and post test results in right and left hand auditory reaction time ($p=0,004$ and $p=0,004$), vital capacity ($p<0,05$), anaerobic power ($p=0,000$), vertical and horizontal jump ($p=0,000$ and $p=0,001$). On the other hand, in the group with low anaerobic power, differences in pre-test and post-test results were determined in the variables: right hand visual reaction time ($p=0,043$), anaerobic power ($p=0,000$), vertical and horizontal jump ($p=0,001$ and $p=0,001$).

Conclusion: On condition that progressive training programs are prepared and principles of plyometric training method are followed, athletes who have low level of anaerobic power can also participate in plyometric trainings just like the athletes who have high level of anaerobic power, and they can increase their level of anaerobic power and vertical and horizontal jump distances.

P150 Movements and Training**TO COMPARE SOME PHYSIAL FEATURES OF SAME AGE GROUP GIRLS WHICH ATTEND TO 7-8 AGED RITHMIC GYM SPORT AND WHICH DON'T*** Sürhat Müniroğlu, *Ayşegül Evren* Ankara University, School of Physical Education and Sports

In this research, it is aimed to compare some physical features of same age group girls which attend to 7-8 aged rithmic gym sport and which don't.

60 undunter girls attend to this research, 30 girls who attend to Ato Sports club and practise 2 days in a week, totally 4 hours and 30 girls who attend to Tuzluca Primary School and have a sport activities. Test batary which is used in the research is the procedure of Simon Fraser Universty's Gleen Krichner's Physical Reliability Test and Follow- Up. In this test, there are 5 test Standing Long Jump, Bench Push-ups, Curl-Up, Squat Jump, 30 Yard Dash (27 43m). The datas are processed to SPSS 11.0. Statistics pocket programme for windows, in the research, 0,05 is accepted as mistake rate, Student T test and Man Whitney U Test are used for comparing groups. At the result of statistic analyses, there can be found reasonable differances ($P < 0.05$) in 7 years old who are doing and not doing sports Curl-Up, Standing Long Jump, there can't be found reasonable differances in 27.43 m running test, squat jump test ($p > 0.05$). There are reasonable differances ($p > 0.05$) in 8 years old girls who are doing and not doing sports between, there can't be found reasonable differances 27.43 m running, Bench Push-ups results; there aren't reasonable differances between Curl-Up, Standing long jump, squat jump test results ($p > 0.05$). According to the Follow- Up procedue, it is found that, 7 and 8 years old girls who are doing starts have good physical properties, 7 and 8 years old girls who aren't doing sports have got average physical properties.

P151 Movements and Training**COMPARISON THE PHYSICAL AND PHYSIOLOGY PARAMETERS ON THE BEFORE & AFTER OF THE PRE-SEASON IN THE 2. LEAGUE SOCCER TEAM*** Nurtekin Erkmen, ¹Turgut Kaplan, ²Halil Taşkın, ²Ersan Kara* Health Sciences¹ Selçuk University, School of Physical Education and Sports² Gazi University, Institute of Health Sciences

The purpose of this study; determined physical and physiology parameters of 2. League soccer team on the before & after of the pre-season and examined impact of this period training on the choosing parameters. 17 professional soccer players whose their mean sport participation period was 10.53 ± 2.60 year, their mean age was 20.71 ± 1.86 year, their mean length was 181.12 ± 5.72 cm included this investigation group.

The end of this studies; was found which the pre-season training were not significantly differences on the systolic and diastolic blood pressure, hand grip, anaerobic power and respiratory parameters. The other ways; determined significantly differences of body mass, resting heartbeat, VY %, MaxVO₂ and 50 yard speed parameters.

P152 Movements and Training**PHYSIOLOGICAL PROFILES OF YOUNG MALE TURKISH NATIONAL FENCING TEAM*** M. Zeki Özkol, *Faik Vural* Ege University Department of Physical Education and Sports

The aim of this research to investigate the physiological profiles (16.1 ± 1.2 age, 174.0 ± 5.6 cm height and 64.5 ± 5.6 kg body mass) of young male Turkish national fencing team ($n=16$). Sit and reach test, vertical jump test, body fat ratio (%), body composition analysis (bioelectric impedance analysis-BIA), Astrand test and Wingate anaerobic power and capacity test were performed. Data were analysis with SPSS 11.0 statistic program, in all parameters mean, maximum, minimum and standart deviation values were determined and Mann-Whitney U test was performed for to determine the differences in reference values with this research values, the $p < .05$ significant value was used. Findings of the research were; sit and reach test 15.8 ± 6.8 cm, vertical jump test 52.5 ± 3.7 cm, skinfold measures; triceps 8.1 ± 2.6 mm, subscapula 9.1 ± 1.5 mm, abdomen 12.6 ± 5.7 mm, suprailiac 12.1 ± 6.3 mm and body fat ratio (%) 12.2 ± 2.2 , body composition analysis with BIA; fat (%) 10.0 ± 2.5 , fat (kg) 6.4 ± 1.7 , lean body mass (LBM, %) 89.9 ± 2.5 , LBM (kg) 58.0 ± 5.3 , total body water (TBW, %) 63.1 ± 2.9 , TBW (lt) 40.6 ± 3.2 , basal metabolic rate (BMR) 1796.3 ± 148.6 kcal/d, estimated average (energy) requirement (EAR) 3007.4 ± 283.6 kcal/d, body mass index (BMI) 21.3 ± 2.1 kg/m², muscle bone mass (MBM) 17.3 ± 2.3 kg, impedance (IMP) 526.75 ± 60.69 Ohms, peak power 12.45 ± 1.23 W/kg, average power 8.44 ± 0.54 W/kg and maxVO₂ 48.0 ± 5.5 ml/kg/min. At conclusion young national fencers peak power values were found higher towards to expected ($p < .05$), but in other parameters the values found unexpected and lower ($p > .05$).

P153 Movements and Training**EFFECTS OF MENSTRUAL CYCLE ON THE SPORTS PERFORMANCE*** Osman İmamoğlu, *Pelın Akyol* Ondokuz Mayıs University, Yaşar Doğu School of Physical Education and Sports

The aim of this study was to examine the effects of menstrual cycle on the female athletes' performance. 48 teakwon-do athletes, 76 judoka, 81 volleyball, and 36 basketball players, total 241 elite athletes participated in this study. A questionnaire constituted from 21 questions about menstrual cycle applied. A one-way analysis of variance and Scheffe tests were performed to assess differences between sport branches about physical and physiological characteristics. Chi square was used to evaluate the regularity of menstrual cycle, performance and drug taking.

The menarche ages of the athletes were 13.92, 13.22, 13.75, 13.86 years respectively. 27.8 % participated the regional competitions, 46.1% participated just the national competitions, 26.1% participated the international competitions. While the menstrual disorders were seen 14.5 % of the athletes in normal time, during the intensive exercise this ratio was increased to 20.7 %. It was determined that during the competition 11.6 % of the athletes used drug, 36.6 % had a painful menstruation, 17.4 % didn't have a painful menstruation, 45.6 % sometimes had a painful menstruation. 63.1 % of the athletes said that their pain decrease during the competition. First 14 days after

the menstruation began, 71 % of the athletes said that they felt themselves well. 71 % of the athletes felt worst just before the menstruation period. 62.2 % of the athletes said that their performance was same during the menstruation, 21.2 % said that their performance got worst.

Both in general and during the training the menstruation period of the athletes has found regular ($p < 0.01$). Most of the athletes said that they have a painful menstruation period, and during the competition their pain decrease. As a result of the questionnaires, during the training and competition number of the athletes that didn't use drug were higher than the athletes that use drug ($p < 0.01$). The number of the athletes that feel good before and during the menstruation were significantly higher ($p < 0.05$, $p < 0.01$). Between the menstruation periods the athletes said that they feel better in the first 14 days than second 14 days ($p < 0.01$).

It has been concluded that the menarche age was high in the athletes. It has found that the physical performance was not affected by the menstrual period and the pain decrease during the training and competition.

P154 Movements and Training

DO CUSTOM-MADE MOUTHGUARDS HAVE NEGATIVE EFFECTS ON AEROBIC PERFORMANCE CAPACITY OF ATHLETES?

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Mouthguards are considered by most authors to be an essential part of equipment for athletes participating in contact sports. The purpose of this study was to evaluate the effect of custom-made mouthguards on the ventilatory gas exchange effects of taekwondo athletes. Twenty-two elite athletes aged between 14-17 years were used as subjects. To determine the effects of mouthguards during exercise, oxygen consumption (VO₂) was measured with portable gas analysis system while an exercise tolerance test with shuttle run test protocol was performed. Respective values with mouthguard were compared to those without mouthguard. Wilcoxon ranks test was used for the statistical analysis. Results showed that wearing mouthguards has no significant effect on maximal oxygen uptake (VO₂ max), minute ventilation (VE), tidal volume (VT) and respiratory exchange ratio (RER) while performing maximal exercise ($P > 0.05$). It can be concluded that taekwondo athletes can use custom-made mouthguards without being afraid of negative effects on their aerobic performance capacity.

Mean values and standart deviations (SD) of the measurements in all atheletes (n=22) with (M) and without mouthguard (WM).

	WM	M	P value
HR max (beat min ⁻¹)	198±1.41	198±1.83	0.910
VO ₂ max (ml min ⁻¹ kg ⁻¹)	51.79±2.12	52.73±1.81	0.846
VE max (L min ⁻¹)	106.32±5.75	108±4.41	0.664
Vt max (L min ⁻¹)	1.91±0.08	1.88±0.07	0.733
RER	1.11±0.01	1.12±0.01	0.649

Mean values and standart deviations (SD) of males and females with (M) and without mouthguard (WM).

	MALE		FEMALE	
	WM	M	WM	M
HR max (beat min ⁻¹)	199±7.24	197±9.75	197±5.99	198±7.65
VO ₂ max (ml min ⁻¹ kg ⁻¹)	59.95±4.99	59.13±6.20	43.64±6.01	46.34±4.72
VE max (L min ⁻¹)	125.36±20.59	123.09±17.71	87.27±17.49	92.91±9.08
Vt max (L min ⁻¹)	2.08±0.42	2.06±0.33	1.74±0.27	1.71±0.24
RER	1.12±0.06	1.11±0.04	1.11±0.07	1.13±0.04



Fig. 3

P155 Movements and Training

BACK MUSCLE FATIGUE IN SUBMAXIMAL ERGOMETER ROWING: AN EMG STUDY

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Objectives: The aim of this study was to determine the muscle fatigue and corresponding alterations in EMG parameters during submaximal rowing effort.

Methods: Nine clinically healthy competitive male rowers volunteered in the present study. Median range for age, body weight and height of subjects were 19 (17-23) yr, 72 (68-91) kg, 176 (171-183) cm, respectively. All subjects were asked to maintain stroke rate at 20 rpm and 200 W workload during 20 minute submaximal rowing test on rowing ergometer and surface EMG signals were recorded from the erector spinae at L2-L4 level on the right and left side. To determine the muscular fatigue, median frequency (MF) and root mean square (rms-EMG) were analyzed at different time points. Repeated measures ANOVA were used to examine the effects of fatigue on the rms-EMG and MF. The significance level was set at $\alpha < 0.05$.

Results: The submaximal rowing effort resulted in a significant ($p < 0.02$) increase in rms-EMG at 9th and 15th min than that of 3rd min value, whereas no significant change was found in MF between time points.

Conclusion: Decreases in MF and increases in rms-EMG are retained as EMG fatigue indices [1]. In this study, since workload applied during the rowing effort was constant, an increase in rms-EMG without any significant change in MF might indicate a decrease in force generating capacities without detection of early physiological manifestations of muscle fatigue due to contractile properties of muscle and motor unit recruitment strategies during sustained contractions.

P156 Movements and Training

THE INVESTIGATION OF SHORT DISTANCE SWIMMER TO COMPARE BETWEEN 50 METER CRAWLSTYLE SWIMMING AND 30 METER SPRINT TEST RESULTS

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The study was aimed to investigate the relationship between 50 meter crawlstyle swimming results and 30 meter sprint test results of male and female swimmers 12 to 15 years of age. Within this, 25 male and 20 female swimmers totally 45, that fall into the same age group were selected from several sports clubs, which go into function in Ankara region.

Average height of selected male swimmers is $x=1,64\pm 0,08$ and average body weight is $x=51,5\pm 7,6$ whereas the average height of selected female swimmers is $x=1,63\pm 0,06$ and body weight is $x=48,5\pm 6,13$ on the average.

During the study; 50 meter crawlstyle swimming results, 30 meter sprint test results, ages, height and body weight measurements of each swimmer was noted and 50 meter crawlstyle swimming results and 30 meter sprint test results were researched for male and female swimmers separately and considerable relationship between swimming results and sprint results was investigated.

Upon completion, the provided frequency values,datas and their relation with each other were analyzed by simple correlation test by using SPSS 12.0 computer package-program.

50 meter crawlstyle swimming grades of swimmers were taken by cronometer and 30 meter sprint test was done by 0.01 sensitive Tümer Elektronik fotosel equipment.

As a result, there is a considerable relation ($p<0.05$) between 50 meter crawlstyle swimming results and 30 meter sprint test results of both male and female swimmers who are at the age of 12 to 15.

P157 Movements and Training

EFFECTS OF CHRONIC EXERCISE ON REPRODUCTIVE ENDOCRINE SYSTEM IN MEN AND WOMEN

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Introduction: Research indicates that endurance exercise training has significant effects upon the reproductive endocrine system of humans. Until recently, this effect was thought to be limited primarily to women. However, a growing body of evidence demonstrates that the male reproductive endocrine system is also effected.

Purpose: The purpose of this study was to investigate the effect of exercise on hypothalamic- pituitary- gonadal axis men and women.

Materyal and Methods: FSH, LH, progesterone, östradiole and testosterone levels were determined in eleven male professional cyclists and six female boxers by radioimmunuassay kits.

Results: Reproductive hormones levels were measured in cyclist men as respectively, FSH= $4,52 \pm 1,99$ LH= $3,90 \pm 0,67$ Testosteron= $3,38 \pm 0,18$ Östradiole= $26,83 \pm 6,96$ Progesterone= $0,51 \pm 0,19$. And in boxer women reproductive hormone levels were measured as FSH= $8,38 \pm 2,50$ LH= $24,50 \pm 1,30$ Östrodirole= $171,00 \pm 46,94$ Progesterone= $2,88 \pm 1,30$.

Conclusions: Results indicate that exercise increased concentrations of gonadotrophines in female boxers more than male cyclists. Reproductive hormone levels were determined in the reference values in the men cyclists.

P158 Movements and Training

EFFECT OF SPORTS DRINK ON ANAEROBIC THRESHOLD

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Objective: The purpose of this study was to examine the effect of sports drink on anaerobic threshold.

Methods: 9 male physical education students participated in this study as $2.6 \text{ kg} \pm 6.4 \text{ cm}$, body weight= 71.06 ± 9.3 years, height= $175.5 \pm$ volunteers (age=23 Subjects were randomly assigned to one of three groups. A cross-over test design and double blind method were used in this study. Subjects' anaerobic threshold was determined by using Conconi Test three times with 3 days apart. Subjects were given 0.5 L of fluid 45 min before the test. Supplied fluids were plain water, water with sugar by 7% and a commercially available sports drink containing carbohydrate by 7% and electrolytes. Subjects were asked not to eat anything within 12 hours before the test. Heart rate of the subjects was recorded during the test by Polar telemetry and anaerobic threshold were determined. One Way Analysis of Variance for Repeated Measures was used to compare the effects of different type of fluid intakes on anaerobic threshold.

Results: Results showed that anaerobic threshold point was attained later with a faster running rate ($F=9.810$, $p<0.05$) and heart rate at the AT point was higher ($F=4.047$, $p<0.05$) when sports drink were consumed compared to plain water and water with sugar. There was no significant difference in maximal heart rate attained during the test ($F=1.410$, $p>0.05$) and the total distance run ($F=0.941$, $p>0.05$) among groups.

Conclusion: Sports drink has improved the anaerobic threshold during Conconi test.

P159 Movements and Training

THE FINAL PHASE OF THE "ATHLETISM DEVELOPMENT PROJECT IN ISTANBUL" IN ITS THIRD YEAR

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Purpose: the purposes of the project are to discover the new abilities with the competitions to be made, to establish an infrastructure to encourage them and to keep the young away from the narcotics, alcohol and cigarette use. To ensure the physical education teachers to concentrate on athletics, to strengthen the athletics infrastructures at schools, to ensure increasing of the school teams and to reinforce and develop the knowledge of the physical education teachers at the meetings to be held. To train sportsmen and professional athletes to compete in name of our country at the 2012 Olympic Games and to increase the number of athletics clubs in Istanbul.

Method: The information related to the competitions to be made at about 2000 schools in Istanbul was sent by means of the National Education District Directorate. We hold a meeting related to athletics with all the physical education teachers once a year under permission. We organize 4-phase competitions with the participation of sportsmen of about 50 schools.

(election, quarter final, semi-final and final). The higher performance children are being observed and we determine that more than 30 teachers are ready to join our studies.

Result: We, as instructors, must create duties for ourselves in the environment we present, develop plans and projects to improve our branches and focus on our researches in that direction. In addition to archive studies, we must make field studies to support the application and other necessary studies to bring our nation one step further in sport. The conditions of our country do not match the conditions of other countries. Even, the conditions of Istanbul do not match the conditions of any other city. Here, we must find regional solutions instead of general solutions.

The work we make is not paid and it requires amateur struggle; so we must find volunteers for this job. As a result of the time we consumed and experiences we gained, we have learnt that the problems may not be solved with the understanding of generality.

Discussion: The children must begin to make sport at their little ages as much as possible and its continuity must be ensured by avoiding the excess loads. Firstly, the family must be earned and persuaded.

The family concept begins to lost its value in foreign countries. But, as the family structure in Turkey is different, the family concept is very important for the children. The teachers are the key step in development.

P160 Movements and Training

INVESTIGATION THE INTERACTION OF THE EFFECTS OF PHYSICAL SKILLS, TECHNICAL ABILITIES AND SOMATOTYPE PARAMETERS OF JUNIOR SOCCER TEAM PLAYER

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This study was done to investigate the relations between somatotype, pass test, speed, slalom, dripping, vertical jump and anaerobic power parameters of Gençlerbirliği 12 years old ($n =$

44) (height; $X = 150,11 \pm 7,77$ cm), (body weight; $X = 40,54 \pm 8,02$ kg) soccer players. For the purpose of this study, 30 m. speed, 30 m. slalom and 30 m. dripping test, jump test for the anaerobic power and 30 second pass test ($r = 0,85$) (Kamar, 2003) developed by McDonald to test the passing technique ability and anthropometric measurements were taken. Pearson Correlation Coefficient was used to investigate the relations between physical abilities, technical skills and somatotype values of players

According to the results of this study, significant differences were observed between physical skills, technical abilities and somatotype values. When look at Correlation coefficients' average and upper values; There is significant correlations between endomorphy ($X = 1,93 \pm 0,86$) and 30 m. slalom test ($X = 8,80 \pm 0,55$ se.) ($r = ,52$), endomorphy and anaerobic power values ($X = 34,62 \pm 7,71$ kg-m/se.) ($r = ,62$), 30 sn. pass test ($X = 18,79 \pm 3,69$ number) and 30 m. dripping test ($X = 12,11 \pm 1,26$ se.) ($r = -,67$), 30 m. sprint test ($X = 5,01 \pm 0,23$ se.) and 30 m. slalom test ($r = ,58$), 30 m. sprint test and 30 m. dripping test ($r = ,60$) ($p < .05$). No significant correlation were obtained among other parameters.

As a result of the study, there is an attractive attention to negative correlation between pass test and dripping test and also there is no correlations between slalom and dripping test. However sprint ability affects on slalom and dripping abilities.

P161 Movements and Training

THE ANALYSIS OF SUCCESSFUL ATTACK ORGANIZATIONS OF GREECE THE EURO 2004 CHAMPION

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The aim of this study is to put forward the similarities and differences of successful attack organizations of Greece the EURO 2004 Champion according to their competitors with numerical and objective data.

Six games of 2004 UEFA European Football Championship which Greece played had been evaluated in our study.

Analysis with video and computer method was used in our study. Attack style, regions, shots and passes were analyzed for the aim of determining the structure of successful attack organizations.

According to the data obtained from the criteria examined; it was determined that the most clear difference between Greece and their competitors were the number of shots, shots on goal and ratio of scoring.

P162 Movements and Training

PHYSICAL CHARACTERISTICS OF AMERICAN FOOTBALL PLAYERS IN TURKEY

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Objective: The purpose of this study was to determine physical characteristics of Turkish American Football players and to compare these characteristics according to playing position.

Methods: A total of 69 American football players from three universities of Ankara participated in this study voluntarily. Subjects' height, body weight, body fat percentage and somatotype characteristics were determined. Body fat percentage was determined by sum of skinfolds (SSF) from four sites (triceps, supscapula, suprailiac and thigh) and somatotype properties was determined according to Heath-Carter system. Independent samples-t test was used to compare these characteristics according to playing position.

Results: Results indicated that Turkish American football players have high body fat (SSF= 84.51±33.43) and endo-mesomorphic properties (5.7-7.8-1.5). Independent samples t-test indicated significant differences in body weight (t=3.435; p<.01), sum of skinfolds (t=3.287; p<.01), endomorphic (t=3.151; p<.01), mesomorphic (t=2.384; p<.05) and ectomorphic (t=-2.91; p<.01) properties between offensive and defensive American football players.

Conclusion: Offensive American football players were heavier than defensive players and also had higher body fat compared to defensive players. Although both offensive and defensive players had endo-mesomorphic properties, offensive players had higher scores on all somatotype properties.

P163 Movements and Training

HYDRATION STATUS OF ELITE TEAKWONDO ATHLETES DURING PREPARATORY CAMP SEASON

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Objective: To the best of our knowledge, there is no study on hydration status of Teakwondo players in literature. Determine the hydration status of athletes different methods have been used. The purpose of this study was to determine and assess over time the hydration status of elite teakwondo athletes (N = 32) during a training camp associated with the Balkan Championship with some of practical laboratory and field methods.

Methods: Measurement of the urine osmolality, conductivity, color and specific gravity was made on the first urine sample of the day, which was collected after waking up but before breakfast. This was done on 3 occasions, at the beginning of the camp, mid time (5 days after from first) and one day before the competition. One-Way ANOVA test and Tukey post hoc was used to compare the three testing periods. Pearson Two-Tailed correlations were also done for all measured parameters and samples. Significance was set at P<0.05 for ANOVA and P<0.01 for correlations.

Results: There were no significant differences in any of the four different urine analyses made over the duration of the training camps (p<0.05). The average values of the three morning urine samples (mean ± SD) were 989 (± 205) mosmol. kg⁻¹ for osmolality, 25.54 (± 6.6) mS for conductivity, 1.02 (± E-02 1.2) gr/cm³ for specific gravity and 4(± 1) scale for color, respectively. Measurements from 32 elite athletes during the camp trainings indicated that one of the weight category sports teakwondo tended to record a higher morning urine osmolality, conductivity, color and specific gravity reflecting their attempts to dehydrate during preparatory camp season to competition. Results obtained from those four methods for determination of hydration level were correlated each other. There were middle and high-level correlations between all methods (p<0.01).

Conclusion: Because the at least moderate level chronic dehydrates status of elite teakwondo players, they should be awakened and educated about the hydration status of athletes. The findings suggest that such as instruments could provide elite athletes with reliable information about their hydration status in the first morning urine samples of different time period. Conductivity and color methods can also use as a quick and easy ways in interpreting an approximation of hydration status of teakwondo athletes.

P164 Movements and Training

ANALYSIS OF AUDITORY EVOKED POTENTIALS IN ARCHERY: A PRELIMINARY STUDY

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Archery can be described as a static sport requiring strength and endurance of the upper body, in particular the shoulder girdle. The bowstring is released when audible impetus is received from a device called "clicker". As the fall of the clicker is an acoustic stimulus, it evokes a sequence of potentials that can be recorded from the scalp of an archer using computer-averaging technique. The purpose of the current project will be the analysis of long-latency Auditory Evoked Potentials in Archery. Two high level male archers aged 28 and 32 years old respectively were participated in shooting and control trials. Shootings were performed from 18 m that is official competition distance with target face. Control trials were conducted in the laboratory conditions without arrow shot. The auditory stimuli were the fall of the clicker presented from bow handle. Electroencephalography (0.5–100 Hz) was recorded with Ag/AgCl electrodes from 2 scalp locations: Right Mastoid and Left Mastoid with Cz reference. There is a negative going wave form about 100 msec after the clicker's fall that is followed by positive going wave form about 200 msec after the fall of the clicker. It was also found in control trials that attention has an effect on archery response. Response to click sound has auditory and somatosensory components. However, somatosensory component disappears because of the refractory period. The peak amplitude of the response may be used as an indicator of attention level. It is concluded that N1 and P2 waves are observed during archery shooting. As mentioned literature, N1 wave is related with attention. Thus, observation of N1 can be an indication of attend condition of the archer.

P165 Movements and Training

SOME PERFORMANCE PARAMETER CHANGES DURING MENSTRUAL CYCLE PERIODS OF ATHLETES AND NON-ATHLETES

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The aim of this study was to determine athletes' and non-athletes' performance parameters during three menstrual cycle periods (pre-menstruation, during menstruation, post-menstruation). 40

athletes (age; 17.25 ± 3.1 years) who have a regular and 40 non-athletes (17.29 ± 0.7 years) menstrual cycle period participated the study. Body weight, body fat ratio, resting heart rate, blood pressures, reaction time, hand grip strength, 20m sprint time and anaerobic power were measured in pre menstruation, during menstruation and post menstruation periods along 3 months. For the statistical analysis, student t-test was used to compare the performance parameters of athletes and non-athletes. One-way analysis of variance was performed to assess differences between menstrual cycle periods.

The mean body weights were 6.9 kg of athletes and non-athletes. The mean menarche age was 13.47 ± 0.11 years of athletes and menarche age was 12.62 ± 0.13 years of non-athletes athletes. Menarche ages and resting heart rates were found significantly different ($p < 0.05$) between groups but body fat ratio and blood pressures couldn't find significantly different ($p > 0.05$). Vertical jump, reaction times, hand grip strength and 20 m sprint parameters were significantly different ($p < 0.05$), but anaerobic power values were not found significantly different ($p > 0.05$) between two groups. Performance parameters didn't differ between menstrual cycle periods in both athletes and non-athletes ($p > 0.05$). It's concluded from this study that athletes attained menarche later than non-athletes. Menstrual cycle periods didn't significantly affect sportive motor performance of basketball, volleyball players, judokas and non-athletes.

P166 Movements and Training

PHYSICAL AND PHYSIOLOGICAL CHARACTERISTICS OF 12 – 14 AGE FEMALE VOLLEYBALL PLAYERS

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The aim of the research was to investigate physical and physiological parameter differences of junior ($n=21$, 12.3 ± 0.6 age, 159 ± 6.8 cm, 49.2 ± 7.8 kg) and young ($n=11$, 14.6 ± 1.1 age, 172.1 ± 5.6 cm, 62.3 ± 5.4 kg) female volleyball players. Body mass index (BMI), body fat ratio (%), vertical jump, hand-grip test, back-grip test, Wingate anaerobic power and capacity test, Astrand test and sit-and-reach test were performed. Data were analysis with SPSS 11.0 statistic program, in all parameters mean, maximum, minimum and standard deviation values were determined and Mann-Whitney U test was performed for to determine the differences between groups, the $p < .001$, $p < .01$, $p < .05$ significant values were used. Findings of the junior and young team players respectively; athletic status 2.4 ± 0.9 and 3.8 ± 1.1 year, BMI values 9.3 ± 1.9 and 21.0 ± 1.2 kg/m², body fat ratio (%) 13.8 ± 1.6 and 15.2 ± 1.4 , vertical jump 44.7 ± 5.0 and 41.7 ± 5.3 cm, hand grip right hand 20.2 ± 4.1 and 25.0 ± 4.2 kg, hand grip left hand 16.7 ± 3.7 and 22.5 ± 3.4 kg, maxVO₂ values 42.9 ± 8.3 and 42.7 ± 6.1 ml/kg/min, peak power values 8.82 ± 1.35 and 9.80 ± 1.40 W/kg, average power values 4.71 ± 0.62 and 6.77 ± 0.74 W/kg, junior team flexibility value 11.2 ± 5.8 cm, young team back and leg strength values respectively 86.6 ± 4.9 and 75.5 ± 9.1 kg were determined. At conclusion; in all parameters except vertical jump and maxVO₂ the results found in favour of young team, for vertical jump and maxVO₂ parameters the junior team's finding better as mathematically.

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Movements and Training

COMPARISON OF METABOLIC RESPONSES TO MODIFIED SHUTTLE RUN TEST APPLIED ON DIFFERENT GROUND SURFACES AND COURSES

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Objectives: The purpose of this study was to compare the metabolic responses to modified shuttle run test applied on different ground surfaces and courses.

Method: 8 male soccer players 22.22 ± 1.92 year, height 174.24 ± 4.35 cm and weight 73.92 ± 7.77 kg were participated as subjects in this study. For the test protocol, two different courses were set up, and subjects were asked to perform a modified shuttle run test in a randomized manner. One of the course was set in a 60 m hexagonous, and the other one was in 100 m oval shape. Indoor and outdoor tracks were parquet and grass surfaced respectively, with 20 m interval markings. A signal stimulator was used for the running pace, and signals came with 20 m intervals. Incremental test protocol was started with 8 km/h and increased up to 12 km/h at a step wise manner. Each step of the test protocol lasted 3 minutes with a 1 minute rest interval, where a blood sample was taken from the earlobe for lactate analysis by photometric method. Heart rate values were recorded every 5 second intervals during the incremental test protocol. A two-way Anova was used for statistical analysis.

Results: As a result, lactate (Fground: 0,361; $p > 0,05$, Fcourse: 2,307 ; $p > 0,05$) and heart rate (Fground: 0,306; $p > 0,05$, Fcourse: 0,60 ; $p > 0,05$) responses to modified shuttle run test applied on different ground surfaces and courses were not significantly different. However, although there was a tendency of higher lactate responses at higher velocities at 60 m compare to 100m courses, these were not significant. Furthermore, interaction effect between ground surfaces and courses were not significant (Flactate: 1,18 ; $p > 0,05$, FHR: 0,22 ; $p > 0,05$).

Conclusion: Although, lactate and heart rate responses to modified shuttle run test applied on different ground surfaces and courses were not significantly different, there was a tendency to higher lactate responses in high running velocities of 60 m than 100 m courses.

P168

Movements and Training

THE EFFECT OF DIFFERENT OVERLOADS WITH THERA-BANDS ON LEG STRENGTH

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Muscle strength is an important physical property in terms of both leading daily works easily and increasing sporting performance. Muscle strength can be developed by using various resistant goods (for example; elastic bands). The purpose of this study is to investigate the effect of different overloads with Thera-Bands on leg strength.

Thirty-six healthy male students [mean (age) =21.03] studying at Physical Education participated to this study as volunteer subjects were divided into three groups randomly as two ex-

perimental groups (16 Repeating groups"16 RG", 8 repeating groups"8 RG") and a control group. Experimental groups were applied to strength training program for extensor leg muscle that led three days a week, three sets a day and 16/8 repeating in each set (90-second rest between sets). Subjects were used Thera-Band as a resistant tool. Static leg strength of the subjects was measured before and after 6-week strength training program. In the data analysis, Wilcoxon, Kruskal Wallis and Mann-Whitney U tests were used.

The results of the showed that while experimental groups showed statistically significant developments from pre-tests to post-tests in terms of static leg strengths ($p < .05$), there was not any chance in control group ($p > .05$). Further, the results of follow-up analyses revealed that the difference with regard to development of leg strength from pre-tests to post-tests between 8 RG and control group was statistically significant ($p < .05$). In other words, the 8 RG developed more leg strength than the control group. These results were further elaborated and discussed.

In sum, it can be concluded that there are positive effects of 6-week strength training program with Thera-Bands on the development of leg strength.

P169 Movements and Training

THE EFFECTS OF 12 WEEKS MOVEMENT TRAINING WITH BALL AND WITHOUT BALL ON PHYSICAL APPROPRIATENESS OF FEMALE CHILDREN VOLLEYBALL PLAYERS

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The purpose of this study was to investigate the effects the movement training with ball and without ball on physical fitness parameters of female volleyball players aged 10-12 years during 12 weeks. Age, height, weight, VO₂max, vertical jump, anaerobic power, 30 m sprint, flexibility, hand grip and leg strength parameters were measured.

Selected volunteer 60 female athletes who consisted of substructure in Ezcacıbaşı volleyball team parted two groups randomly. They applied the movement training with ball practice as A group and without ball practise as B group during 12 weeks. A group values was found as mean age (10,40±0,74), mean height (146,20±4,83), mean weight (36,76±5,38) and B group values was found as mean age (10,93±0,70), mean height (143,97±6,62), mean weight (34,49±3,59).

In the age, height, weight, VO₂max, vertical jump, anaerobic power, 30 m sprint, max leg power, hand grip, flexibility and audio-visual reaction time parameters had no significant differences between A and B groups pre-test values ($p > 0,05$).

In the age, height, weight, VO₂max, anaerobic power, 30 m sprint, max leg power, hand grip and flexibility parameters had no significant differences between A and B groups post-test values ($p > 0,05$). The vertical jump parameters ($p < 0,05$) and audio-visual reaction time parameters ($p < 0,01$) had significant differences.

While height and weight parameters ($p > 0,05$) had no significant difference, VO₂max, vertical jump, anaerobic power, 30 m sprint, max leg strength, hand grip, flexibility and audio-visual reaction time parameters had significant differences the between A group pre and post-test values ($p < 0,01$).

While weight, flexibility, VO₂max, vertical jump, anaerobic power, 30 m sprint, max leg power, hand grip and audio-visual reaction time parameters ($p > 0,05$) had no significant differences, Weight parameters had significant differences between B group pre and post-test values ($p < 0,01$).

P170 Movements and Training

ANAEROBIC POWER AND CAPACITY OF NATIONAL LEVEL ATHLETES

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Objective: The purpose of this study was to compare the differences in lower body anaerobic power, capacity and fatigue index of national level athletes.

Method: 212 male national level athletes (track & field: n=11; basketball: n=14; boks: n=25; wrestling: n=92; handball: n=42; judo: n=13; alpine skiing: n=6; northern skiing: n=4; and sailing: n=5) were performed 30 s wingate anaerobic test following the anthropometric tests and warm-up with 50-60 rpm cycling in bicycle ergometer. After wingate test, the anaerobic power (AnG), capacity (AnK) and fatigue index (YI) calculated and then one-way Anova design was used to compare the sport events according to AnG, AnK and YI with the significant level of $p < 0.05$.

Results: There were significant differences among the sport events in AnG, AnK and YI (respectively; $F(8,211)= 4.31, p < 0.05$; $F(8,211)= 7.09, p < 0.05$ and $F(8,211)= 2.41, p < 0.05$).

Conclusion: Significant differences were found among the sport events which have different training background in lower body anaerobic power, anaerobic capacity and fatigue index.

P171 Movements and Training

COMPARISON OF THE LOW EXTERMITE WIDENESS AND CIRCUMFERENCE AND VERTICAL JUMP MEASUREMENT BETWEEN UNIVERSITY SEDANTERY AND BASKETBALL PLAYERS

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Objective: The aim of this study was to compare the low extermite (hip, knee, ankle, metatarsal), wideness, circumference measurement (hip, thigh and leg) and vertical jump values between university and sedantray basketball players. In addition, All data were classified according the universities.

Methods, In 4-8 march 2002, volunteer 54 male basketball player from 5 university teams attended basketball group championship organized by federation of universities and 20 sedanter male students attended to the research. Ages of the participant male basketball players were 20,92±1,07 years and the ages of sedanter were 21,30±1,59. In the measurements Low extermite measurement like; hip, knee, ankle and metatarsal wideness ap-

propriate to antropometric protocols and circumference measurement like; hip, thigh and leg were taken for vertical jump, vertical jump meter test was carried out. The data was analyzed by using descriptive statistics. In addition, independent sample t test was used for analyzing the different characteristics of the groups ($p < 0.05$).

Results: The attended basketball players wideness measurement were hip $30,29 \pm 1,64$ cm knee $10,40 \pm 0,77$ cm, ankle $8,15 \pm 0,64$ cm, and metatarsal wideness $10,25 \pm 0,93$ cm, circumference measurement were hip $101,15 \pm 6,71$ cm, thigh $58,88 \pm 5,99$ cm and leg circumference $37,74 \pm 2,94$ cm. the vertical jump measurement of low ekstiremite were hip $30,12 \pm 2,52$ cm, knee $10 \pm 0,72$ cm, ankle $7,55 \pm 0,42$ cm and metatarsal wideness $9,72 \pm 0,67$ cm, also their ekstiremite circumference measurement were, hip $95,6 \pm 6,25$ cm, thigh $52,65 \pm 5,93$ cm and vertical jump measurement were $48,20 \pm 8,64$ cm.

Conclusion, it is discovered that there is a meaningful relationship ($P < 0,05$) between measurements (like low ekstiremite knee, ankle, metatarsal wideness, kuadriiceps, Kalf circumference values) and vertical jump, in university basketball players and sedanteries.

P172 Movements and Training

CONCENTRIC ISOKINETIC SHOULDER INTERNAL AND EXTERNAL ROTATION STRENGTH IN TENNIS PLAYERS

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The primary purpose of this study was to measure isokinetically glenohumeral joint internal and external rotator peak torque, peak torque/body weight, total work and average power values in competitor tennis players, the other purposes were to determine whether significant differences exist between the dominant and nondominant extremities and also between the sport and control groups.

Thirteen healthy trained tennis players and thirteen sedanteries were tested bilaterally on a Cybex II series isokinetic dynamometer at 60, 180 and 240 degrees/sec for concentric internal and external rotation of the glenohumeral joint with the arm in 90 degrees of abduction and with the elbow in flexion. A standardized protocol and testing guidelines were strictly followed.

All results are expressed as the mean and standard deviation. The Wilcoxon Signed-Ranks Test was used to test for differences between extremities for isokinetic parameters and The Mann-Whitney U Test was used to find differences between groups. P-values of < 0.05 , < 0.01 and < 0.001 were adopted for test of statistical significance.

No significant difference between the dominant and nondominant shoulder was found for external rotation peak torque at either testing speed. Significant greater ($p < .01$) dominant arm shoulder internal rotation was measured for peak torque at all testing speed compared with the nondominant extremity. Significant differences ($p < .01$) nondominant arm shoulder internal/external rotation ratios were measured for peak torque at all testing compared with the dominant side. Significant differences were found between the groups for all parameters ($p < .01$).

The results of this study are important for athletes who perform predominantly unilateral upper extremity movement patterns, expose to maintain muscle strength balance and possibly reduce the chance of overload injury.

P173

Movements and Training

ASSESSMENT OF GENDER DIFFERENCES IN ANAEROBIC POWER AND CAPACITY

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Objective: The purpose of this study was to examine gender differences in anaerobic power and capacity adjusting absolute power outputs for body weight (BW), lean body mass (LBM) and thigh muscle cross sectional area (CSA) by using two different statistical methods.

Methods: A total of 53 university students (27 males & 26 females) from the department of physical education and sports were voluntarily participated in this study. Wingate test was used to assess anaerobic power and capacity. LBM and thigh muscle CSA were determined anthropometrically. Two different statistical methods, One Way ANOVA and Covariance Analysis, were used to determine gender differences. First, absolute anaerobic values were scaled to BW, LBM and muscle CSA. Second, these anthropometric variables were used as constant covariates to remove their effects on anaerobic power outputs.

Results: Results of both One Way ANOVA and Covariance Analysis revealed significant sex differences in both absolute and relative anaerobic power and capacity.

Conclusion: Since peak and mean power are not size independent use of anthropometric variables for normalization of anaerobic power outputs may give misleading results in studies comparing gender differences. Therefore, analysis of covariance can be used as an alternative method for these kinds of comparisons.

P174

Movements and Training

THE ASSESSMENT OF THE MECHANICAL WORK AND POWER DURING THE SNATCH TECHNIQUE IN THE WEIGHT LIFTING

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The purpose of this study is to show the kinetic differences between elite weight lifters, by calculating the force applied to the bar, work done and power output by weight lifters during a snatch movement. Three elite weight lifters who become the successful at 56 kg category during the 71st men's world weight lifting championships, were participated in this study. Two cameras operating at 25 frames per second were used to record the attempts of the weight lifters. Selected 18 anthropometric points on the weight lifters' body and 2 points on the bar were digitized as a three dimensional. The force applied to the bar, work done and power output were calculated using an inverse dynamic analysis that combined the displacement of the midpoint of the bar.

These results show that the kinetic factors determine technical differences the position of the body, the maximal height of the bar, the force applied to the bar, work done and power output in the snatch lifting.

P175 **Movements and Training**

THE INVESTIGATION OF THE RESPIRATORY PARAMETERS OF MALE CLIMBERS AT DIFFERENT HIGH-ALTITUDES

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Inn this study, it was aimed to investigate the responses male climbers gave to the respiratory parameters at different high altitudes.

During to study, the parameters of male climbers such as age, height, weight, sport age, hand gripping strength, FVC, FEV1, PEF, PIF, FEV1/FVC, and FEF were measured.

27 volunteer male climbers with $26,22 \pm 6,31$ mean age level were included into our criteria.

At different high altitudes, while no significant differences were found four FEV1/FVC parameters at $p < 0,05$ level, significant differences were found at $p < 0,01$ level for FVC and FEV1 parameters.

For PEF and FEF parameters, significant differences were found at $p < 0,05$ level, and also a significant difference was found for PIF parameter at $p < 0,01$ level at different high altitudes.

Consequently, it was found out that respiratory values may be changeable depending on the increase or the decrease of the altitude.

SPSS package software was used for statistical analysis, varyans analysis test was used to investigate the differences among measurements, and tukey HSD test was used to find from what caused the difference to result.

P176 **Movements and Training**

POWER AND STRENGTH LEVELS OF ELITE FEMALE VOLLEYBALL PLAYERS

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The aim of this study was to examine some power and strength properties of female elite volleyball players. Eleven elite state-level of club teams players in Izmir-Turkey, volunteered for the present study.

Physical characteristics as stature, weight, height, BMI and body fat ratio (by Yuhazs method) of participants were evaluated respectively and performance characteristics as vertical jumping (by jumpmeter), anaerobic power and capacity (by Wingate Anaerobic Power Test), and isokinetic knee strength (by isokinetic dynamometer) and also left and right hand grip strength (by hand-grip dynamometer), leg and back strength (by back-grip dynamometer) and aerobic power (by Astrand Rhything Test) were determined respectively. The strength of knee extensors and flexors were measured bilaterally by using an Cybex II at 60, 180, 300 deg/s. Peak torque (Nm) and peak torque/body weight (Nm/kg), total work (J) and average power (W) of isokinetic hamstring and quadriceps and also H/Q ratios, which are important of the prevention of injuries, were determined and differences of the legs were compared.

End of the tests, who had at least 6 years' sport carrier, players' ages were 22.18 (year), BMI were 21.52 kg/cm², body fat ratios were $14,25 \pm 1,62$ %, vertical jumping heights were $49,54 \pm 4,22$ cm, anaerobic powers and capacities were $10,58 \pm 1,52$ W/kg and $7,34 \pm 0,58$ W/kg, and also heights were $179,82 \pm 5,25$ cm, weights were $69,63 \pm 6,22$ kg, right and left hand grip strengths were $29,15 \pm 5,04$ and $27,51 \pm 3,37$ kg, back and leg strengths were $101,59 \pm 21,12$ and $84,87 \pm 32,67$ kg, aerobic powers were $45,94 \pm 8,19$ cc/dk/kg.

The obtained findings were analyzed, whether there were statistical differences between the legs through the Wilcoxon Test, by using SPSS 10.0. A P-value of $< 0,05$ was adopted for test of statistical significance. All results were expressed as the mean and standard deviation. The results were compared to those found in the literature for other populations of the athletes, where available.

Results were consistent with existing studies on elite Turkish female athletes. However, since it has been showed that H/Q ratios uploads with increasing velocities in many foreign studies, degradation H/Q ratios at 300 deg/sec in our findings is conflicting. Peak torques of right leg were higher than left side at 180 ve 300°/sec ($p < 0,05$).

P177 **Movements and Training**

BLOOD PRESSURE RESPONSES TO SUPRAMAXIMAL EXERCISE

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Our aim in this study is to investigate arterial blood pressure dynamics during inactive recovery period following supramaximal dynamic exercise. Nine male handball players (Age 21, $5 \pm 1,5$) took Wingate Anaerobic power test. Blood pressures and heart beat rates were taken respectively during rest before the test, immediately after the exercise (T0) and during seated inactive recovery period (T3, T6, T10, T15, T20 and T25). Systolic blood pressure showed a significant increase immediately after the exercise and did not indicate any significant decrease until the end of the recovery period, which lasted 25 minutes. Diastolic blood pressure showed a decrease between 6-15 minutes of the recovery period ($p < 0,008$), but the decrease of 7 mmHg observed at the end of the recovery period was not statically significant. Also, average artery pressure did not drop significantly below the rest level until the end of the recovery period. In conclusion, this study has not indicated any significant changes in blood pressures, which have been reported in submaximal studies.

P178 **Movements and Training**

THE EFFECTS OF THE CODING OF NUMERIC-VERBAL EXPRESSIONS AND MEANINGFUL VERBAL EXPRESSIONS INTO MEMORY ON THE LEARNING OF THE COMPLEX ARM MOVEMENTS

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Objective: The aim of the study is to identify the effects of coding numeric-verbal expressions and meaningful verbal expressions into the memory on the learning of the complex arm movements.

Method: The sample of the study includes thirty seven-grade students. The study was carried out during the 2003-2004 school year. The sample was divided into two groups: the first group was taught by complementing numeric-verbal expressions (15 students) and the second one was taught by complementing meaningful verbal expressions (15 students). The study has the desing of test1 and test2. It uses the ranking scale to determine the level of movement. The measurement of the movement was performed before test1 and the consistency of interraters was searched for. The complex arm movements were shown to both groups for five times and the presentations were videotaped. In order to identify the effects of the coding in the memory on the learning of the complex arm movements, test2 was administered to both groups two weeks after the presentation and the movement patterns were analysis by three experts using the ranking scales. "t" test was employed to measure the value and matches. For the purpose of reliability in-class correlations were used and error margin was accepted as .05.

Results: The data showed a high correlation between interrater scores ($R=.840$). The value of "t" test was found to be 10.826.

Conclusion: The findings of the study indicated that there were statistically significant differences between two groups in terms of learning the complex arm movements.

P179 Movements and Training

EFFECTS OF 12 WEEKS GAME AND NO-GAME ATHLETISM TRAINING ON PHYSICAL APPROPRIATENESS OF MALE CHILDREN DOING ATHLETISM

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The purpose of this study was to investigate the effects the track and field training with game and without game on physical fitness parameters of male athletes aged 10-12 years during 12 weeks. Age, height, weight, right and left hand grip strength, anaerobic power, stuffed ball throwing, VO₂max, 30 m sprint and long jump parameters were measured.

Selected volunteer 60 male athletes who consisted of substructure in track and field branch at the Burhan Felek stadium parted two groups (30 x 2) randomly. They applied the movement training with game practice (A Group) and without game practice (B Group) during 12 weeks.

In the compare of two groups pre-test values, age, weight, right hand grip, left hand grip, anaerobic power, stuffed ball throwing, VO₂max and 30 m sprint parameters had no significant differences ($p>0,05$). But height, long jump and flexibility parameters had significant differences ($p<0,05$).

In the compare of two groups post-test values, right hand grip, left hand grip, anaerobic power, stuffed ball throwing, 30 m sprint and flexibility parameters had no significant differences ($p>0,05$). But weight, long jump and VO₂max, parameters had significant differences ($p<0,05$).

In the compare of the A group pre and post-test values; while weight and stuffed ball throwing had no significant differences ($p>0,05$), Right hand grip, left hand grip, long jump, anaerobic power, VO₂max, 30 m sprint and flexibility parameters had significant differences ($p<0,01$).

In the compare of the B group pre and post-test values; while weight, right hand grip and stuffed ball throwing parameters had no significant differences ($p>0,05$), Left hand grip, long jump, VO₂max, anaerobic power, 30 m sprint and flexibility parameters had significant differences ($p<0,01$).

P180 Movements and Training

ENERGY CHANGES AT LAST FOUR STRIDE AND TAKEOFF FOR TWO DIFFERENCE LONG JUMP PERFORMANCE

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The aim of this study is to analyse the energy values of the last four stride and to determine energy changes between before and after takeoff. Two long jumpers which has difference performance participated to the study. Grup I: 4 male athletes (age 21.6 ± 5.14 years; height 182.2 ± 5 cm; weight 72.8 ± 3.1 kg) in performance ≥ 6.00 m and Grup II: 5 male athletes (age 21.0 ± 1.9 years; height 178.5 ± 3.1 cm; weight 71.25 ± 1 kg) in performance ≤ 6.00 m. The data for this study was recorded from athletes who lives in Ankara and who studies in Akdeniz University School of Physical Education.

The data was collected using two stationary video cameras (50 Hz) and recorded 5 performance from each athletes.

When examine to horizontal velocity of CM and energy which is formed during the last four strides, has been not found significant differences at each stride velocity and each stride energy ($p>0,05$).

There is no significant differences between total energy at the end of the takeoff and initial energy before the takeoff ($p>0,05$). When compared decreased energy (Edec) after the takeoff, there is significant differences between two groups ($p<0,05$).

P181 Physical Education

INVESTIGATION OF SOME FACTORS HAVE AN EFFECT ON BODY COMPOSITION AMONG PE STUDENTS

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The purpose of this study was to investigate some factors that is being considered to have an effect on body composition (aerobic endurance, physical activity level, life stile) among the second year students of coaching department of School of Physical Education and Sports at Marmara University.

Thirty volunteer students participated in this study. The mean age, height and weight of the subjects were $22,4\pm 2,3$ (year), boy $179,13\pm 9,02$ (cm) and $72,9\pm 12,1$ (kg), respectively.

In order to determine body composition of the subject, body mass index (BMI) was calculated. 1 Mile run test was used to find out the aerobic capacity of the subject. Beacke Questionnaire Test and life style inventory were made to evaluate the physical activity level (PAL) and life style point of each subjects, respectively.

Pearson correlation coefficient test (two tailed) was used to find the relation among the variables ($p<0,05$; $p<0,01$). Simple and multiple regression test was used to find out the effect of variables on body composition ($p<0,05$)

It was found that the highest relationship with BMI was life stile ($R = 0,392$, $R^2 = 0,054$, $f = 5,263$, $p < 0,029$). In addition, life stile together with aerobic endurance had positive relationship on body composition ($R = 0,462$; $R^2 = 0,214$; $f = 3,802$; $p < 0,035$). As a result, all of life stile, aerobic endurance and PAL together had significant relation with BMI ($R = 0,498$, $R^2 = 0,248$, $f = 2,970$, $p < 0,05$).

P182**Physical Education****THE OPINIONS OF THE TEACHERS ON EFFECTIVE USING SPORTS HALL ABOUT OUT-DOOR ACTIVITIES IN THE STATE-PRIVATE, PRIMARY AND SECONDARY SCHOOL'S PHYSICAL EDUCATION IN ANKARA**

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The purpose of the study is the opinions of the teachers on effective using sports hall about out-door activities in the state-private, primary and secondary school's physical education. The study group were 66 (33 male, 33 female), physical education teachers from the total of 36 schools which were the state 16, private 20 (13 primary, 7 secondary) schools.

The data of the study were obtained with questionnaire which forms of 44 questions and used likert type 4. Its reliability tested with two parts and reliability coefficient was found: 846.

The data were explain with present and frequency and also used the comparison of the difference about the opinions; t test and one way ANOVA were used. Source of the differences between values were determined by using Tukey test at $p < 0.05$ significance level.

As a result, opinions of the teachers were participate about the effective using of sport halls in the schools and out-door activities. In addition, there were a significant differences ($p < 0.05$) in physical education teachers among sex, kind of schools (state or private) and teachers experience period of year about the opinion of out-door activities to proper its purpose, to be gain towards sports culture and competition. The opinions, whom especially private teachers, about out-door activities, they also participate and positive in to do its purpose, sufficient time to do and used in sports hall especially students purpose among in physical education teachers.

P183**Physical Education****AEROBIC ENDURANCE AND PHYSICAL CHARACTERISTICS OF YOUNG ELITE SOCCER PLAYERS**

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Objective: The purpose of study is to evaluate the physical and physiological characteristics of elite young players, and determine the relationships between physical parameters and aerobic capacity.

Method: 14 male elite young soccer players (age $18,07 \pm 1,07$) from Galatasaray Sports Club Young Soccer Team participated in the study. Spearman Correlation Test was used for relationships between variables.

Results: Physical and physiological parameters of players were as; body mass $68,37 \pm 5,4$ kg, height $175,85 \pm 6,37$ cm, percent body fat $4,58 \pm 2,06$, muscle mass $65,20 \pm 4,78$ kg, aerobic capacity (VO₂max) $55,53 \pm 4,75$ ml.kg⁻¹.dak⁻¹, anaerobic power $105,95 \pm 9,44$ kgm/sn. There were significant relationships between Anaerobic Power and BodyMIndex ($r = .576, p < 0.05$), Body-Mass ($r = .881, p < 0.01$), Bazal Metabolism Rate ($r = .864, p < 0.01$), PercentBodyFat ($r = .669, p < 0.01$), MuscleMass ($r = .785, p < 0.01$) variables in the same way.

Conclusion: High levels of VO₂max may show a superior training period. A well planned training can increase aerobic endurance significantly. Coaches have to consider that point when planning training sessions.

P184**Physical Education****PRIMARY SCHOOL STUDENTS' PERCEPTIONS ABOUT SAME SEX VERSUS COEDUCATIONAL PHYSICAL EDUCATION CLASSES**

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The purpose of this study was to descriptively investigate the students' perception of their abilities and their preferences for same sex and non-coeducational physical education classes. Participants were 530 students from public ($n = 306$) and private ($n = 224$) schools (6th, 7th, 8th grades). The questionnaire was used to collect data on students' demographic information, students' perception on their abilities, and their preferences. The results showed that all students from both public and private schools liked physical education. It was also found that boys rated themselves as having high level of skill, strength and endurance than the girls did and they tend to prefer non-coed physical education classes. Girls' preferences regarding co-education versus non co-education physical education exist. However, these preferences relied on the situation. The study revealed that both boys and girls have different perceptions about the coed and non-coed physical education classes which should be considered while preparing physical education curricula.

P185**Physical Education****EFFECTS OF A WEB-ENHANCED FIRST AID COURSE ON THE FIRST AID KNOWLEDGE OF UNIVERSITY STUDENTS IN MIDDLE EAST TECHNICAL UNIVERSITY**

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The purpose of this study was to examine the first aid knowledge of a group of university students before and after a web-enhanced first aid course. 421 senior students participated in this study. The course was designed according to the standard first aid training program of Turkish Red Crescent Society and Ministry of Health of Turkey. Theoretical part of the course was presented from a web-based education environment using a university web server. In addition, students followed a 2 hour/week lab sessions for 6 to 8 weeks. Students' knowledge was assessed before and after the course by Turkish Red Crescent first aid proficiency test. According to the paired t-test results, first aid knowledge was improved significantly at the end of the course ($p < 0.05$). This pilot study revealed encouraging results for the efficiency of a web-enhanced first aid course in development of university students' related knowledge.

P186**Physical Education****THE EFFECT OF MENTAL TRAINING ON THE SKILL LEARNING SWIMMING IN THE STUDENTS OF PHYSICAL EDUCATION**

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This is a quasi-experimental study designed for examine influence of mental training on the skill learning of swimming among male students of physical education at Kurdistan University. The students in this study ($n = 136$) are predominately male (74%).

The research method is the utilization of pretest- posttest on the experimental and control groups. The sample (n= 36) students that they are randomly selected and then randomly divided equally in the two groups (each group 18 students).

Two groups taught for 16 weeks with two sessions per week, in addition to this, the experimental group has been participate mental training program. Time for mental training was 10 minute that this group does before swimming training.

Physical identification showed that there is not difference between two groups in the pretest. There is not significant difference between distance and technique pretest.

The comparison posttest indicated that significant different between two groups, that experimental group had the better qualification in distance and technique from other one.

These results showed that mental training with training with practical training are effective (positive) in the improvement of teaching and motivation of students that are in the field of physical education.

P187 Physical Education

THE EVOLUTION OF PSYCHO-SOCIAL STATE OF THE GIRL SOCCERER WHOSE AGE UNDER 16 THAT ATTENDED TO THE RIVA - PREP CAMP IN 20-26 JUNE 2004

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Women soccer in Turkey started in 1993 with an official league and this league continued to 2003. Due to the decision of the Federation adult women league was cancelled and instead of it a league which footballers that were born in 1988 and afterwards can play was founded. As preparations for this league a tournament with the 9 team's participation was held in June, 2004.

The aim of study is to find the Psycho-social, economic and cultural level of the girls born in 1988 and afterwards and the reasons of their tending and playing soccer and to find out their point of views to women soccer and to put the necessary advices to spread the women soccer.

In our study we tried to reach to primary sources. 148 girl footballers of the 9 teams that attended to tournament of the Turkish Football Federation which was organised in Riva in 20-26 June 2004 form the scope of our study.

The obtained data in the study is calculated in SPSS For Windows statistics pocked program then frequency and percentage ratios are presented as tables.

According to the findings of the study, what the reasons for tending to play soccer are the desire of joining national team 71.6%, to be an elite player 59.4%, to the question if the conditions are appropriate for the women to play and improve soccer and if the conditions are appropriate to make the women soccer common 82.9% of them said "no", and to the question What should be done to grade to improve women soccer? 71.4% of them said the federation should support the teams that have women soccer branch.

Considering this result, to improve and make the women soccer common in Turkey, we suggest that TFF should form national teams of 14- 16-18-21- years, the trainers should be educated intermittently, laws should be organized in order to let the sy-tate school girl students to compete in soccer category, the clubs that have women soccer team should have substructure and due to

this the federation should give students post cards, bags, pencils, rubbers etc. that endear women soccer, and other clubs should be encouraged to form women soccer branch.

P188 Physical Education

PSYCHO-SOCIAL AND DEMOGRAPHIC PROPERTIES OF 14-16 YEAR OLD YOUNG BASKETBALL PLAYERS IN ISTANBUL

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Through this study, the psycho-social and demographic properties of 14-16 years old young basketball players in Istanbul have been examined. What kind of factors created the gradually increasing interest in basketball have been tried to be determined. Basketball gives person self-confidence, solves his adoption problem in the community, increases his physical and mental capacity, helps to remove psychological and physical problems.

In the study, a survey of 22 questions was applied to 14-16 years old 30 men and 20 women basketball players in Istanbul. Statistical evaluation of the results show that;

The basketball players are high school students. 58% of them are private school students (college at high school level) and Anatolian High School Students. 86% of them are from nuclear families. 92% of them have been living in Istanbul for at least 10 years. 60% of them were encouraged to play basketball. 46% of those were encouraged by their families. 6% by a friend, 4% by teacher and 4% were encouraged by others. 60% of the players think that there is no violence in basketball. 72% of them think that basketball gives them a privilege in their society. 62% of them want to be taller and stronger. 32% of them are glad with their body condition. 58% of the players believe that height increases performance. 76% of them think that they are tall enough and %80 of them think basketball doesn't help them to become taller. According %86 of them, in Turkey there is not enough basic concepts. %78 of them plays basketball to become professional.

It is evaluated as the result of the survey, psycho-social and demographic features are very effective in age group 14-16 in choosing a branch of sport.

Sport is seen as a social status and a privilege the same ages. It is believed that basketball helps them to become taller so this is an important factor for children to choose this sport. Children who choose basketball belong to educated and affluent families.

P189 Physical Education

THE OPINIONS OF PHYSICAL EDUCATION AND SPORTS CANDIDATE TEACHERS ABOUT THE EFFECT OF THE 'TEACHERS PRACTICE LESSON'

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* Ankara University School of Physical Education and Sports

The purpose of this research is to determine the opinions of the physical education and sports candidate teachers about effect of

the 'Teachers Practice lesson' and to improve proposal through the obtained results.

The research sample group consist of 274 students from 8 different universities of physical education and sports department in Turkey. The Questionnaire was used to obtain the data and applied to the physical education and sports students who are currently 4th. years students in 2002-2003 teaching-learning year.

The data of this research were obtained with questionnaire which form of 15 questions and used like type 5. It's reliability tested and reliability coefficient was found: .842. The data of the research have been evaluated by SPSS for Windows Statistics Pocket Programs, then frequency and percentage ratings are presented as tables and also used the comparison of the difference about the opinions, t-test and one-way onova were used at $p < 0.005$ significant level.

This research is important, because the opinions of the physical education and sports of candidate teachers about the effect of the teachers practice lesson' will help them for their teacher studies about the determination of the problems both learning and teaching environment.

As a result, opinions of the candidate teachers were participate about effect of the "Teacher Practice Lesson" in universities of physical education and sports department. In addition there were a significant difference ($p < 0.05$) between the opinions of the male and female candidate teachers, in which subjects were the teachers' supports and guide in this lesson and also communication with advisor teachers in the universities. There were also significant difference ($p < 0.05$) between universities and school type (primary, state-private school) in the opinions of the candidate teachers.

P190

Physical Education

THE EUROFIT TEST BATTERY EVALUATION OF MALE AND FEMALE ELEMENTARY SCHOOL STUDENTS' AGES BETWEEN 7-11 IN TRNC

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The aim of this study is to investigate whether there is a significant difference between male and female elementary school students in Turkish Republic of Northern Cyprus according to the results of EUROFIT test battery. The study will also aim to find whether there is casual relationship between male and female students with respect to EUROFIT test results.

The sample for the study included students from Neareast Elementary School with ages ranging from 7 to 11 years ($n=233$). Each students performance in 13 different EUROFIT tests were recorded. The test were implemented in Neareast Elementary school's gymnasium between 23 December 2003 and 9 January 2004.

The data collected were analyzed and t-test was used to find the difference between physical fitnesses of the male and female students. Correlation analysis was used to find the relationship between the physical fitnesses of different age groups. Seperate correlation analyses were used for male and female students. Level of significance for the study was set at $p=0,05$.

According to the results of the statistical analyses it was found that there is a significant difference between male and female students in relation to flexibility, power, static right hand strength running speed and endurance tests.

The results of the study at the Near East Elementary school show that, the male student are superior to female students in functional strength, trunk strength, static right hand strength, running speed and cardiorespiratory endurance. On the other hand female students are significantly superior to male students in flexibility.

As the results of the study proved that the male students obtained significantly higher scores in situps, endurance shuttle run, running speed and standing broad jumping. It can be concluded that female students with ages 7-11 years in TRNC are physically less active than the male students of the same age even there was no any significant differences in antropometric measurements.

P191

Physical Education

PHYSICAL EDUCATION TEACHERS' OPINIONS ABOUT THE TEACHER BEHAVIOR DIMENSION OF CLASSROOM MANAGEMENT

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Objective: The aim of the study was to determine the opinions of physical education teachers about the teacher behavior dimension of classroom management and to designate whether these opinions would change according to gender, profession age and school type of teachers.

Methods: Questionnaires were administered to 500 physical education teacher from some cities of Turkey (Adana, Ankara, Diyarbakır, Gaziantep, İstanbul, İzmir and Trabzon). In analysis of variables percentages, frequencies and X2 test and alpha level used was 0.05.

Results: Majority of participants' answers showed that, teachers prefer to imbibe democratic life culture in classroom environment (%66), to determine the classroom rulls (%70) and classroom leader with students (%66.2), when share the theoretical part of the lesson, providing to share students knowledges by question and answer (%70.8), preferring the student centered instruction styles in practice part the lesson (%59.2), when the doing exercise, teachers prefer giving individual feedback (%67.6), when the teachers met a misbehavior, they prefer to warn student with soft voice and reminding the rulls (%52), for reinforcing the subject, they prefer to make students educational games (%55.8), when the evaluate students during the lesson, preferring the way of observation (%57.8) Also, significant difference was found between some variables by gender, profession age and school type ($p < 0.05$).

Conclusion: As a result the opinions of physical education teachers about the teacher behavior dimension of classroom management shows similarity with teacher's behavior who believe in student centered management comprehension.

P192**Physical Education****EVALUATION OF THE EFFECT OF RHYTHM EDUCATION ON ACQUIRING COMPLEX GYMNASTICS SKILLS AND MOTOR CHARACTERISTICS*** Oya Erkut Atilgan, *Salih Pinar* Marmara University School of Physical Education and Sports

The aim of this study was to compare the effects of traditional education methods with rhythm aided teaching methods used for the acquisition of complex gymnastic skills on motor characteristics and skill learning.

For this purpose we studied 25 male subjects, whose age ranged between 18 and 25 years (mean age $21,3 \pm 2,1$ years) and had no prior experience in gymnastics and music education. We constituted a study (13 subjects, mean age $21,5 \pm 2,3$ years) and a control group (12 subjects, mean age $21,0 \pm 1,7$ years).

Both groups received a standard education program (3 d/wk and 1.5 h/d) with identical content but different teaching methodology.

The intra-group development between the first and second test was assessed with the non-parametric Wilcoxon test. The inter-group differences between the first and second test were assessed with the non-parametric Mann-Whitney-U test. The correlation of dependent and independent variables were obtained by Pearson correlation.

As a result, comparison of differences in scores of the first and second test of obligatory movement series technique and rhythm, revealed a significant increase both in the study ($p < 0.001$) and in the control group ($p < 0.05$).

This results show that developing rhythm and rhythmization skills will improve movement technique and accuracy in presentation.

As our study was practically orientated, we think that it will forecast further studies on the importance of general and specific rhythm education in acquisition of motor skills.

P193**Physical Education****GENDER INTERACTION IN COED PHYSICAL EDUCATION WITH QUANTITATIVE AND QUALITATIVE APPROACH: A CASE STUDY*** Canan Koca, ¹Giyasettin Demirhan* Baskent University, Sport Sciences Department¹ School of Sport Sciences and Technology, Hacettepe University

Objective: The objective of this study was to examine teacher-student interaction and students' experiences in coed physical education classroom focusing on gender stereotyped beliefs.

Methods: Participants in this study consisted of two physical education teacher and 32 eight grade students from one private school that situated in suburban of Ankara in Turkey. The modified observational instrument with the combination of TSI and INTERSECT was used to assess teacher-student interaction in classroom. In order to gain students' experiences, focus group and individual in-depth interviews were also conducted.

Results: The finding of this study demonstrated that classroom interaction was mostly initiated by physical education teachers

(70.5 % for female teacher and 79.8 % for male teacher) and directed to boys (46.6 % for female teacher and 70.2 % for male teacher). Through observations of teacher-student interaction and interviews with both teacher and students suggests that girls and boys are treated quite differently in coed physical education classroom and boys appear to dominate most of the classroom interactions. In addition, the gender-stereotyped beliefs of teacher and students seem to have an influence on this different classroom interaction.

Conclusion: As a conclusion, the findings of this study indicated that both female and male physical education teachers interact more frequently with boys and these different interaction influenced by both gender stereotyped beliefs of teachers and students.

P194**Physical Education****APPLICATION OF MULTIPLE INTELLIGENCES IN TEACHING PHYSICAL EDUCATION AND A SAMPLE OF DAILY LESSON PLAN FOR PHYSICAL EDUCATION COURSE*** Mehmet Ali Çeliksoy, *Coşkun Bayrak* Anatolian University, School of Physical Education and Sports

Instead of looking for excuses concerning pupils' qualities in education system, pupils have to be helped by fixing up how they can learn better (which multiple intelligences they have) and by emphasizing equality of opportunity in education.

From the point of view of education institutes, the equality of opportunity in education will be achieved when pupils' personal interests, skills and potentials are maintained and improved as well as possible. Teachers have to modify and revise their traditional thoughts, practices and knowledge about pupils' different interests and intelligences (Logical-mathematical, Linguistic, Spatial, Bodily Kinesthetic, Interpersonal, Intrapersonal, Musical, Naturalist)

Although Multiple Intelligences applications, which have been carried on since 1980s, are not in desired level in Turkish Education System they have started to be approved. The last example of this is a change of directive which was published in the journal of announcements, numbered 2551, by the Ministry of National Education and which has been in force since 2003-2004 education year. According to change yearly plan of each course in primary and secondary education is divided into units and daily plan which is prepared taking Multiple Intelligences Theory as a model started to be applied. With this application, Turkish National Education System will have more modern, more functional and more reasonable structure and the individuals educated in this system will have universal qualities.

The aim of this study is to guide for preparing and practising physical education lesson plan which is connected with multiple intelligences. To this aim a daily lesson plan of physical education course which was prepared according to the sample plan appropriate to Multiple Intelligences Theory and which published by the Ministry of National Education in the number of 2551 in August 2003 is presented.

P195**Physical Education****THE COMPARISON OF RHYTHM SENSES OF ELITE SPORTSMEN AND SEDANTER**

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In this study, we measure the rhythm senses sportsman practicing at an elite level and sedentary individuals and determine the differences of their mentioned rhythm senses. Besides, we search the difference of rhythm senses between the sportsmen of various branches.

The ground of this research is to determine if there is a relation between sports and rhythm senses and if there is any connection, comparing those with people that are not sportsman. In this frame, the aim of this research is to determine the level of rhythm senses of elite sportsmen and sedentary individuals and to display the differences if any.

The universe of the research is the elite sportsmen and people that have never dealt with sports. The sampling is a total of 359 people which consists of 199 elite sportsmen from and 160 people that declared they have not dealt with sports.

During the research, data has been gathered by a rhythm specialist via an inventory of 10 variables that is prepared for determining the rhythm sense. Then, the data has been converted into numerical values and statistically analyzed by a computer.

As a result, a significant difference of rhythm sense level has been found between elite sportsmen and sedentary. In addition, according to a test applied to sportsmen, there exist a difference between the sportsmen of individual sports and team sports.

P196**Physical Education****EVALUATION ISOKINETIC PERFORMANCE AND ANTHROPOMETRIC FEATURES OF NATIONAL DEAF BADMINTON SQUAD**

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Objective: The lower extremity is exposed to high physical activity in badminton players. Adaptations occur in muscles, tendons and bones in response to high training loads. This study was performed to evaluate the influence of badminton on the muscles and ligaments of the knee.

Methods: The study included 5 male badminton players and 5 male non-active control groups. Subjects are badminton players who players in national badminton team of Turkey. Anthropometric determinations (height, weight, and age and limb length) were made on each subject. The components of examination included range of motion and muscle strength. The range of motion and the strength of muscles of the knee joint were evaluated by Biodex System 3. muscle strength determinations were performed at speeds of 60,180 and 300 deg/sec. These procedures were applied to

the both groups in some conditions. All these measurements were done in Kocaeli University Sport Science Investigation Center (SBAM).

Results: There were no significant differences between the players and the control group regarding anthropometric measurements. In the 60, 180 and 300 deg/sec. test, the mean strength values for knee flexion and extension, there were statistically increases in the badminton players compared with the control group. As a result of range of motion measurements of the knee flexion and extension, we found significant range of motion degree for knee flexion in badminton players.

Conclusion: High repetition of motions and high muscular forces affect the musculoskeletal system. This study showed that knee flexors and extensors are highly involved in badminton. Thus, overload of the lower extremity affect the muscle strength of badminton players.

P197**Physical Education****THE USE OF TEACHING TECHNOLOGY BY THE PHYSICAL EDUCATION TEACHERS IN THE PRIMARY SCHOOLS IN ANKARA**

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*Giyaseddin Demirhan

* School Of Sport Sciences And Technology

Objective: The study deals with the use of teaching technology by the physical education teachers in the public primary schools.

Method: The sample of the study includes physical education teachers at the secondary level. A total of 170 teachers participated in the study(98 males and 72 females). In the analysis of the data frequency (f), percentage (%) and distribution techniques were used. The error margin .05.

Results: Those teachers who used teaching technology while identifying the characteristics of students had in-service training (83.3%). 88.8% of the participants who employed teaching technology in determining the characteristics of students had graduate education. In terms of establishing the objectives, female teachers were found to use more teaching technology (82.3%). Again,those teachers with in-service training experience (taking "educational technology" course) seemd to employ more teaching technology in order to establish their objectives. It was also found that teachers with 6-10 teaching experience seemed to use teaching technology more frequently in order to select teaching method, conditions and teaching materials.

Conclusion: Those teachers who used teaching technology while identifying the characteristics of students had in-service training, the participants who employed teaching technology in determining the characteristics of students had graduate education. It was also found that teachers seemed to use teaching technology more frequently in order to select teaching method, conditions and teaching materials.

P198**Physical Education****EVALUATION OF TEACHING PRACTICE EXPERIENCE WITH THE PERCEPTION OF PROSPECTIVE TEACHERS**

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The purpose of this study was to evaluate "Teaching Practice" experience of prospective teachers according to their own perceptions. Twenty four prospective teachers who were attending this course participated in the study. The participants answered open ended questions in a questionnaire at the beginning (first week), during (fourth and eighth weeks) and at the end of the semester. Qualitative data were analyzed by classification of data according to pre-determined categories. Then, percentage distribution of data was presented for each category. Findings indicated that prospective teachers perceived "Teaching Practice" course as a general teaching experience at the beginning of the semester. It seemed that this was realized at the end of the course. According to the prospective teachers, learning classroom discipline and control, classroom management, content knowledge related to teaching-learning were the positive aspects of "Teaching Practice" experience. They perceived their personal characteristics, and communication skills as well developed aspects of their teaching skills during the course. As a results, it can be said that "Teaching Practice" course helped to develop prospective teachers' teaching abilities in a real school culture. In addition, it provided experience for relationship with students, and increased content knowledge level.

P199**Physical Education****THE EFFECT OF MOVEMENT EDUCATION PROGRAM IMPLEMENTED IN PRESCHOOL ON PHYSICAL CHARACTERISTICS OF CHILDREN**

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The purpose of this study was to determine the effect of movement education program which was implemented regularly in preschool period on physical characteristics of 5-7 years of age kinder garden children. The subjects were 32 test and 32 control group consisted in preschool period. Total 64 boys and girls children were randomly selected. Movement education program was implemented on the group 1 hours a day in a week during six months.

In this study pre-test and post-test were applied on both control and test groups. Antropometric set was used in diameter measurement, skinfold was used in fats of children. Gullik tape was used in circumference measurement, Seca stadiometer was used in length measurement, electronic scale (0,001kg) was used in weight measurement, tape measure was used in arm span and sitting height measurement. SPSS statistical program was used for statistical analysis and Pair-Samples T test was used in the comparison of pre-test and post-test.

According to the results of subjects' pre-test, post-test, there was significant difference ($p<001$) in; physical characteristics, diameter measurement, skinfold measurement; supscapula and abdominal, circumference measurement; head, chest, biceps and abdominal. In the control group there was significant difference ($p<001$) in length, weight, arm span, diameter measurement and skinfold measurement; subscapula and abdomi-

nal. According to the subjects' pre-test, post-test results there was significant difference ($p<005$) in biceps and calf round but there was significant decrease in the calf fat rate. There was significant difference ($p<005$) in control group in sitting height and skinfold measurement; biceps, calf and calf girth. Subjects' body mass index pre-test mean was 15,45 and 17,11 in post-test. Control group body mass index pre-test mean was 15,93 and 17,01 in post-test.

P200**Physical Education****INVESTIGATION OF FOOTBALL UNIT IN PRIMARY SCHOOL PHYSICAL EDUCATION*** Süleyman Murat Yıldız , ¹Sabahattin Deniz* *Muğla 75. Yıl Science School*¹ *Muğla University, Faculty of Education*

It is important for students of primary schools to acquire the basic skills in soccer as in the other branches of sports. In this study it was aimed to investigate if the objectives regarding basic goalkeeping techniques in the curriculum of physical education in primary schools were sufficient or not, and at which level they should be given. Depending on this point, the problems concerning the basic techniques of goalkeeping were also investigated. 465 students from primary schools in Muğla province took part in this study. The data were analyzed by percentage and chi-square test.

It was determined that 1.5% of these 465 students were licensed goalkeepers; and 98.5% of them gained their basic techniques in goalkeeping from the teachers of physical education in primary schools, 1.5% had them both in primary schools and in the background education programmes of the professional clubs. Of the basic techniques, catching and punching techniques were taken by 100% of the students, the basic starting position and distribution techniques by 3.9% and diving technique by 1.5%. The techniques known 100% were taken in Grade VIII. On the other hand, it was also determined that 17% of the applications were carried out in the fields and 83% were performed in concrete areas. Besides these, as a result of target behaviours related to basic goalkeeping techniques placed in the soccer units in the current physical education curriculum for Grade VIII students, it was observed that some behaviours were not emphasized.

P201**Physical Education****COMPARISON OF ACTIVE LEARNING AND CLASSIC LEARNING METHODS IN PHYSICAL EDUCATION AND SPORT*** A. Dilşad Mirzeoğlu , ¹Uğur Doğan, ¹Fatih Efe* *Abant İzzet Baysal University*¹ *Ministry of Education*

The purpose of this study was to explore the effectiveness of Active Learning Method over Classic (traditional) Learning Method. The participants were from Bolu Kültür İlköğretim Okulu. There were 34 students in this study, 14 of them were boys and 20 of them were girls from two different classes. All participants were chosen randomly. Students were assigned in control and experiment groups and pre-test post-test control-experiment group models administered.

To serve the goal of the study, Classic Learning Method was used at control group while Active Learning Method was used at experiment group. Some techniques in active learning were chosen to apply in these techniques, for example, self-evaluation, pantomime, classification, interesting information, finding headlines and slogan, gossiping. At the beginning and end of each unit, achievement tests were used to measure cognitive improvement in football and basketball and to measure psychomotor skills observation forms were used which was developed according to skills in selective units test was used according to the purpose of the study. Besides using t test, the researcher analyzed the tables of the means, standard error and percentages. Analyses of the data revealed that there was no significant differences between Active and Classic Learning Methods during teaching football and basketball skills ($p > 0.05$). Also, there was a significant improvement with time in cognitive and psychomotor skills in basketball and football units for students both in control and experiment groups.

P202

Physical Education

A STUDY ON DETERMINING RELATIONS OF PHYSICAL EDUCATION TEACHERS WITH "VOLUNTEER SPORTS UNIONS"

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Purpose: This study aims at determining the relations of physical education teachers with volunteer sports unions.

Method: In this study, the relations between 21 provincial representatives (ASKF) of Turkish Amateur Sports Clubs Confederation (TASKF) selected randomly among Amateur Sports Clubs Federation (ASKF) in 71 provinces and 330 physical education teachers in charge in these provinces has been evaluated. A survey composed of a total of 14 questions, 11 of which are multiple choice and 3 of which are open ended, has been applied in order to determine the relations of physical education teachers with ASKF. Data gathered has been evaluated using SPSS 10.01 package program by deriving percentage, frequency and weighed averages and the results found to be meaningful have been illustrated in schedules.

Results: It is found that physical education teachers have demands from ASKF at a rate of 4.5 %, which is very low, and have no demands from ASKF at a rate of 10 %. It has been found that their demands from ASKF have been met at a rate of 40.9 %, which is a middle level, and the reason for not having any demand from ASKF was stated to be as " the expectation that the demand would not be positively replied" at a rate of 38.0 %. Physical education teachers stated at a rate of 6.4 % (very low) that ASKF worked efficiently, whereas they stated the contribution of ASKF to the development of sports as quite high at a rate of 18.2 % and as low at a rate of 16.4 %. They stated that the rate of cooperation of ASKF with educational institutions was very low at a rate of 19.1 %.

Conclusion: There are many institutions with which the physical education teachers are in contact while performing their in and out of school teaching activities. It was found that their relations with ASKF, which is stated as a volunteer organization among these institutions, were not at a desired level. The foregoing reason for this can be explained such that the level of contribution of ASKF to ideal sports environment is not directed towards school sports and that a healthy relationship was not built be-

tween physical education teachers and ASKF. It can be said that establishing the vital coordination between physical education teachers and volunteer sports unions will have a positive impact on the development of Turkish sports.

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Physical Education

SOMATIC AND PSYCHOLOGICAL COMPONENTS OF THE STATIC BALANCE TEST IN 10-15-YEAR-OLD SCHOOL CHILDREN

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Introduction: The static balance is one of the most important sign of the psychomotor development in each age group. The preadolescence is that period when the biomechanic and psychological changes could result in both positive and negative effects in the motor performance. (Tóth, Sipos, 1998) The background factors of the static balance differences in the preadolescence were analyzed in our study separately for boys and girls in three different age groups (10-11-years, 12-13-years, and 14-15-years).

Methods: Motor tests (Static balance, 60 m dash, 10 m slalom run with ball, standing broad jump, Burpee-test, hip joint mobility test, and Cooper-test), and psychological measures (Tennessee Self-concept Scale: physical self-concept, and STAIC-H, A-State, A-Trait), and anthropometric measures (body height and body weight, BMI) were collected for 299 school children (132 boys and 167 girls).

Results: The boys' results are better than girls in all age groups for Cooper test and slalom run with ball. The hip joint mobility significantly better also in all age groups. 60m run and standing broad jump gender difference occurs only in group 2 and 3 in favor of boys. In group 3 (14-15-year of age) boys are better in Burpee test. There was no significant gender difference in the static balance in our sample.

P204

Physical Education

A COURSE DESIGN APPROACH FOR TEACHING BEGINNING ARCHERY: A QUALITATIVE STUDY

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Archery is described as fine, discrete, and closed motor ability and there are different methods in teaching basic skills. The purpose of the study is to organize a beginning archery course in terms of the needs of the audiences. The participants of the study were defined as follows: the Clients, audience, target population, and the coordinator of the study. The data gathering procedures involved interviews, observations, and literature review. The purpose of the course was set as; to provide the student with opportunities to learn techniques and fundamentals of shooting, basic safety considerations, archery equipment selection and care. The course is designed to help each student to attain through practice, create, and promote interest in archery. Upon successful completion of this course, the students will be able to participate archery as a lifetime leisure sport. General Objectives of the Course, Specific Learning Outcomes, Activities, Materials, Method, Student Evaluation, Topical Outline, and Course Evaluation procedures were clearly defined in the study.

Table 1. The evaluation procedure in Archery Course for Beginners

	Theoretical	Practical	Total
Quiz 1	5	-	5
Quiz 2	5	-	5
Quiz 3	5	-	5
Mid-term	15	20	35
Final	20	30	50
Total	50	50	100

P205**Physical Education****COMPARISON OF SUCCESS AT SCHOOL OF 12-15 YEARS OLD STUDENTS WHICH DO SPORTS AND WHICH DO NOT**

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We have seen that there are many different reasons for this investigation, and we have said that we are mainly concerned with a school successful related in sports activities. We have included which of the students ages 12 to 15 both those students who practiced to sports and also those who do not these activities can be strongly affected by what happens in the school-life.

92 students can be joined with this investigation. They were chosen from five different schools in Sakarya. Test subjects are divided into two parts which including to practice sport (n = 46), and not to practice sport (n = 46). We asked the students who practiced to sports about 23 questions and the other students who do not practiced about 14 questions which can be applying a questionnaire. Questionnaire's applied how to the filling and the need for the students by monitoring their teachers in the classrooms. The evaluated of the students which is loaded on averages from all over lessons at the end of the first terms educational years of 2002-2003 and 2003-2004 can be used as academically achievement criterion. The datum were loaded to Microsoft Excel and then they were transferred to SPSS 7.5. Finally we can be analyzed by Frequency and Anova (Post Hock) and the method of T-Test.

As a result of, the students to 12-15 ages who practiced sports can be affected school successful in ways of positively ($p > 0,01$). The families who practiced sports are well- educated better than the other families. Sport programs must be designed to suit the requirements and personal characteristics of those practicing them, as well as the institutional cultural, socio-economic and educating conditions of each members.

P206**Physical Education****THE HAND-EYE COORDINATION DEVELOPMENT OF KINDERGARDEN CHILDREN, A YEAR PILOT STUDY**

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The aim of study was to evaluate development of hand-eye coordination in a year at the age of 4-7 years old preschool children, pilot study. In this research, 60 subjects are randomly selected at the kindergarden the age of 4-7 year old.

Pre-test are practiced at study group, after a year post-test are practiced. Hand-eye coordination time and mistake numbers were measured in this research. At the end of measurement, all gathered data were analysed in SPSS for Windows. Paired samples T Test were used in statistical analysis.

As a result of statistical analysis, some values of study group were found significant between the pre-test measurement as time and mistake numbers ($p < 001$). The time values (22%) and mistake numbers (64.7%) of study groups to pre and post.

P207**Physical Education****TO DETERMINE THE ANAEROBIC POWER PARAMETERS OF THE KULELİ MILITARY SCHOOL STUDENTS; A PILOT STUDY**

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The purpose of this study was to determine the anaerobic power parameters of the Kuleli Military High School students. The total 1071 students, aged 14-20 years were subjected to this study. The measurements were done at the Kuleli Military High School.

Findings of the study showed that; the mean value of standing long jump was $205,77 \pm 20,17$ cm, (the lowest value was 120 cm, highest value was 310 cm), the mean value of vertical jump was $51,25 \pm 7,45$ cm., (the lowest value was 26,25 cm., highest value was 84 cm), and the mean value of anaerobic power was $125,68 \pm 13,72$ kgm/sec., (the lowest value was 83,76 kgm/sec, highest value was 174,38 kgm/sec).

It was concluded that there were no differences between the mean results of anaerobic power parameters of the Kuleli Military High School's students and licensed athletes of other sports branches in the Turkish Sports Federations.

P208**Physical Education****SCHOOL OF PHYSICAL EDUCATION STUDENTS ATTITUDES TOWARD TEACHING**

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It is widely recognized that the overall quality in education mainly depends on the quality of teachers and a sound programme of professional preparation of teachers. In other words, teacher education is an integral component of the educational system,

therefore; teaching should be inculcated through a series of well designed activities in respect of training of teachers. Being a teacher is a life-long process beginning at school and continuing into their professional years.

In this line of reasoning, research has indicated that biographical experiences in sport have effects on teachers' belief, attitudes and confidence about teaching physical education. By the same token, teaching perspectives are widely affected by teachers' perceptions of their prior experiences in sport and physical activity. However, some researchers in the area of physical education have provided evidence that ideologies or beliefs may change as a result of field experiences. In light of today's fast-paced life style, teachers (human capital) must be seen as resource as never before in the school system. It is inevitable that physical education programs should focus on the development of positive attitudes of preservice teachers.

With this general thrust, the purpose of this study is to investigate preservice teachers' attitudes and beliefs to physical education. Further, the differences in these dependent variables among sub-groups defined by gender, age, years in school, and major field of study are also examined.

For the purpose of this study, cross sectional method of survey was employed to analyze relationships among variables. A total of 280 subjects (70% response rate), who were university students in the school of physical education and sport, voluntarily participated in the study. The data were collected by using scale of Attitudes Towards Choosing Vocation which were developed by Ozgur in 1995. In the present study, validity of the instrument was found sufficiently high ($\alpha=0.84$). Further, the statistical analyses of the study included descriptive statistics, correlational analyses and univariate analysis.

The results of the univariate analysis with Gender ($F(1;278)=9.35$; $p<.05$) and Major Field of Study ($F(2;277)=6.03$; $p<.05$) were found to have significant effect on preservice teachers' attitudes and beliefs to physical education. The results of the study was further elaborated and discussed.

P209 Physical Education

A SELECTION OF AMERICAN FOLK DANCES AND THEIR HISTORICAL ROOTS

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A selection of traditional Round, Contra, Square and Line dances will be taught at a beginning level. Information describing the origins of each type of dance along with the appropriate style and movement vocabulary will be included. A resource book and CD will be available to participants.

P210 Physical Education

EVALUATION OF MOTOR SKILLS ANALYSIS OF KULELI MILITARY SCHOOL STUDENTS

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The purpose of this study was to analyze the effect of the educational process on the motor development of the Kuleli Military

High School students. The total 1071 students were participated in this study. The measurements were done at the Kuleli Military High School.

Findings of the this study showed that; the mean value of 30 m dash was 4.53 ± 3.11 sec, (the lowest value was 3.61 sec, highest value was 5.86 sec); the mean value of right hand grip was 38.75 ± 6.88 kg, (the lowest value was 16.9 kg, highest value was 64.9 kg); the mean value of left hand grip was 37.35 ± 6.72 kg, (the lowest value was 17.2 kg, highest value was 65.1 kg); the mean value of leg power was 156.63 ± 41.70 kg, (the lowest value was 63.5 kg, highest value was 301 kg); the mean value of curl up was 30.15 ± 3.49 (the lowest value was 20, highest value was 44); the mean value of shuttle run was 91.21 ± 16.96 (the lowest value was 35, highest value was 154); and the mean value of Max VO2 was 48.76 ± 5.11 ml/kg/min, (the lowest value was 30.2 ml/kg/min, highest value was 66.2 ml/kg/min).

The result of this study showed that the motor performance parameters of the Kuleli Military High School students were similar to the previous research's findings.

P211 Physical Education

DETERMINATION OF BODY COMPOSITION OF KULELI MILITARY SCHOOL STUDENTS

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Results of our research, is to determine the body composition of Kuleli Military School Students. 1071 students aged between 14-20 participated in this study. Measurements were done at sports hall of Kuleli Military School.

In the research skinfold measurements, diameter measurements and circumferences measurements were applied to the students. The results were as follows: mean skinfold measurements of subscapula 9.35 ± 3.30 mm; biceps 4.48 ± 1.57 mm; triceps 8.69 ± 3.05 mm; suprailiac 7.58 ± 3.86 mm; calf 10.85 ± 4.34 mm; percent body fat 12.25 ± 3.50 ; mean of body fat mass 7.95 ± 3.14 ; mean of lean body mass index 55.49 ± 6.72 ; mean diameter of humerus 7.35 ± 1.13 cm; femur 10.34 ± 1.23 cm; mean biceps circumference of bended arm 28.71 ± 2.67 cm; mean circumferences of calf 35.46 ± 2.58 cm.

The study of our research on Kuleli Military School students in the area of body composition showed that they are fit as expected and gave results in accordance with mezzomorphic characteristics.

P212 Physical Education

ATTITUDES OF PRE-SERVICE TEACHERS TOWARD TEACHING PROFESSION IN PHYSICAL EDUCATION AND SPORT DEPARTMENT IN ABANT İZZET BAYSAL UNIVERSITY

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It is great value to consider the pre-service teachers' attitudes towards teaching profession is very important for their success in teaching. The goal of this study was to examine the attitudes of pre-service teachers toward teaching profession in physical education and sport department. The study included an analyses of attitudes according to their major, sex and year at school. 124

pre-service teachers at the first and last year in physical education teaching and training education department served as the participants. Data were collected by using Teaching Attitude Scale developed by Aşkar and Erdem (1986) used to determine attitudes of pre-service teachers. This scale has two subscales. The reliability of first subscale which is "Enjoyment of Teaching Profession" was found as .78 and the reliability of second subscale which is "The Value to the Profession" was found as .67 and alpha coefficient for the overall scale was .80. T test and Mann-Whitney U test were used according to the purpose of research with α level of 0.05. Besides using t test and Mann-Whitney U test descriptive statistics- mean, standart error were used to explore attitudes of pre-service teachers. Analyses of the data revealed that there was no significant difference between male and female pre-service teachers' attitudes toward teaching profession, however, there was significant difference between first and last year pre-service teachers' attitudes toward teaching profession, with attitudes of first year pre-service teachers was higher than the attitudes of last year pre-service teachers in physical education teaching department. Also, results showed that the attitudes of pre-service teachers in physical education teaching department were more positive toward teaching profession than attitudes of pre-service teachers in training education department.

P213 Physical Education

ATTITUDES OF PRIMARY SCHOOL STUDENTS TOWARD THEIR PHYSICAL EDUCATION CLASSES IN TURKEY

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Objective: The purposes of the study were a) to determine the attitudes of primary school students toward physical education (PE), and b) to examine the relationships among attitudes of students and students' gender, academic achievement, educational level and occupation of their parents.

Methods: Participants consisted of 1112 (567 boys and 545 girls) students were selected from primary education (grades 1 through 8). They were from different provinces (80) located in seven regions of Turkey. The Turkish version of Wear Attitude Inventory was used to measure attitudes of the subjects.

Results: The results revealed that students had positive attitudes toward PE in regard to general perspectives rather than social, emotional and physical attitudes. The results also indicated that there was a statistically significant difference between general attitudes of PE and students' academic achievement. However, findings revealed that educational level and occupation of parents did not affect student' attitudes.

Conclusion: It was concluded that highest scores were obtained by students in general attitudes, but their scores were low in respect to social, emotional and physical attitudes toward PE in Turkey. The reasons should be examined in detail by conducting surveys and interviews among the students. Furthermore, additional studies should be conducted that use or develop a variety of instruments to measure students'attitudes toward different aspects of physical education.

P214 Research Methodology

EVALUATING THE SUCCESS IN FOOTBALL ACCORDING TO ABILITY AND SKILLS USING ANALYTIC HIERARCHY PROCESS

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Today in the world business, the managers especially who are involved in decision making role, are searching ways to handle decision making process in a systematic and scientific methods since identifying the all sort of problems they could have met and bringing a professional solution for them has become extremely difficult. The scientific and systematic decision making action are always to be renewed by supporting computer technologies and mathematical and statical techniques as time goes by.

In decision making, among the managers who have more difficulties than the others, the technic directors have a reasonable place. The directors decision are strictly criticized in transfers of players, team formation and tactics applied in match. In such a hard environment the directors should make their decisions resistant to criticisms and as objective as it could be. At that point one can think that the idea of applying the numeric decision making techniques that are based on scientific layers, could be an extremely useful and important tool the directors while making decisions. In this study, by using "Analytic Hierarchy Process (AHP)" a numeric multi-criteria decision making technique , the importance values of criterias that will be used in evaluating the success according to ability and skills in football are identified and after this step, the best forward player is selected by using those values. AHP is a technique that is designed to solve complex problems that involve objective and/or subjective criterias. By the help of this method the pre-defined criterias' importance values are identified by the decision maker and selection is easily made among the decision options for each criteria. Basically, when the studies about players skills and their performances depending on their skills are examined , it is clear that finding the suitable criterias have a reasonable importance on their own. However these criterias could change according to the line of science of the decision makers. One essential defect in those studies is evaluations acted in mental, physical and technical ways are considered separately. AHP model used in this application has a significant advantage of considering both technical, mental and physical criterias together. Although some the criterias that will be stated in the basic criterias have qualitative and some have quantitative property, by AHP technique , those criterias will be used together.

P215 Research Methodology

PHD THESES IN TURKISH SPORTS SCIENCES: A STUDY COVERING THE YEARS 1988-2002

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Background: Undergraduate Education in physical Education and sport sciences is widely performed in our country. Gaining new faculty to the schools of physical Education and Sciences and supporting the academic dimension of sports sciences with scientific work requires postgraduate training in physical Education and sports sciences. In this study PhD studies concerning Physical Education and Sports Sciences in Turkey have been evaluated.

Methods: The database of the Turkish Council of Higher Education has been searched for PhD theses with different combinations of keywords like "Sport(s)", "All Dissertations" ve "Physical Education". The searched covered the period of year 1988-2002. Theses were classified according to the institute, year, university, the title of the mentors and the field of sports sciences. Classification have been performed by two investigators separately. The inter and intra validity of the investigators ratings of the sports sciences fields were high (Kendall Tau_b=0.84 ve 1.00, p <0.01).

Results: The search with the keywords "sport(s) and all dissertations" revealed 227, with "sport(s) and only sport(s)" 207, with "physical education and all dissertation" 57 and with "physical education and sport(s)" 50 results. Most of the theses were prepared in Institutes for Health Sciences (n=196, 86.3%), secondly in Institutes of Social Sciences (n=25, 11.0%). Theses originated mostly from Marmara (n=90, 39.6%), then from Gazi (n=59, 25.9%) and from Dokuz Eylül Universities (n=25, 11.0%). Theses were mentored by Full Professors (n=124, 54.6%), Associate Professors (n=64, 28.1%) and Assistant Professors (n=33, 14.5%). Ninety two theses (46.9%) were prepared in Training and Movement Sciences, 40 (20.4%) in Sports Management, 29 (14.7%) Psycho-Social Fields of Sports Sciences, 23 (11.7%) Sports Health Sciences and 13 (6.6%) in Sports Pedagogy. Theses were mostly performed in Training and Movement Sciences [$\chi^2(12)=33.2, p=0.01$].

Conclusion: The number of PhD Theses in Sports Sciences is increasing. Since sports sciences is multidisciplinary and has its own body of Knowledge Institutes of Social Sciences, Natural Sciences, and Educational Sciences need to be encouraged to establish new programs for Sports Sciences. According to the unique and multi-disciplinary needs of Sports Sciences the foundation of an Institute of Sports Sciences might be an appropriate step to respond to the scientific needs of Sports scientists.

P216

Sports Nutrition

THE ANALYSIS OF THE LEVEL OF NUTRITION KNOWLEDGE OF SPORTSMEN DEALT WITH THROWN BRANCHES OF TRACK AND FIELD

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In this study, it is aimed at searching the levels of nutrition knowledge of sportsmen dealt with the thrown branches of track and field.

This study comprises 51 voluntary male sportsmen and 49 female sportsmen who have been active in various clubs on thrown branches of track and field, totally 100 voluntary sportsmen. The personal knowledge and the level of nutrition knowledge have been investigated with a questionnaire.

No significant difference was found at the level of $p > 0,05$ among the level of nutrition knowledge, branch of sports and gender dimensions. While a significant difference was found at the level of $p < 0,05$ between the level of nutrition knowledge and the place they live; significant differences were found at the level of $p < 0,01$ among the period of sports, age, the amount of income, their being national sportsmen or not and having the education of nutrition or not dimensions.

According to the results of the study, it is seen that sportsmen have medium degree interests on knowing the nutrients. Their age, being national sportman, amount of income, placements, and education of nutrition affect having the knowledge of nutrition. In our country it is concluded that more detailed emphasises needed on sportsmen performance and the usage of nutrition in sportsmen education.

P217

Sports Nutrition

SWEAT LOSS AND FLUID INTAKE IN YOUNG MALE LONG-DISTANCE RUNNER

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Objective: In this study, we monitored environmental temperature, and investigated sweat loss, fluid intake volume and dehydration rate during long-distance running exercises in young male athletes.

Methods: The subjects were 63 healthy young male students (age 16.7 ± 0.8 yr, height 167.8 ± 5.5 cm, body weight 53.0 ± 5.3 kg). As measurements, environmental temperatures, total sweat loss (TSL), total sweat rate per unit area of body surface per hour (TSR: g/m²/h), the percentage of TSL to initial body weight (%TSL), fluid intake volume (FIV), the percentage of FIV to total sweat loss (%FIV), dehydration rate (%DHR) were measured in long-distance running exercise.

Results: The results were as follows:

1. The mean values of WBGT ranged from $18.1 \pm 1.0^\circ\text{C}$ to $20.5 \pm 0.7^\circ\text{C}$. The WBGT corresponded to the "nearly safe (fluid intake should be appropriately supplemented)" levels according to the guidelines for prevention of heat disorders established by the Japan Amateur Sports Association.
2. FIV ranged from 1663.8 ± 383 to 2201.9 ± 528 g ($831.9 \pm 192.9 - 1101.0 \pm 174.2$ g/h, $15.7 \pm 3.3 - 20.8 \pm 4.6$ g/kg/h).
3. TSR ranged from 538.7 ± 88.7 to 711.4 ± 158.1 g/m²/h.
4. There was a significantly positive correlation between FIV (g/kg/h) and TSL (g/kg/h) ($p < 0.0001$). FIV tended to increase with increases in TSL. However, the FIV was less than TSL. The mean value of %FIV was less than 50%.
5. The students drank little before the start of exercises, less than 100 ml, but tended to gulp water from thirst immediately after the end of exercises.
6. During the training camp, the dehydration rate of 3% or more was observed in about 40% of subjects after running exercise. This is caused by a small amount of fluid intake during exercises.
7. There were positive correlations between %DHR and TSL or TSR ($p < 0.001$), and negative correlation between %DHR and FIV (g), FIV (g/kg/h) and %FIV ($p < 0.001$). There were close positive correlations between FIV (g, g/kg/h) and TSL or TSR ($p < 0.001$) (n=186).

Conclusions: To prevent heat disorders during sports activities in junior athletes, only encouraging them to drink liquids periodically is insufficient, and they should be instructed to aggressively increase the frequency of fluid break. In addition, enlightenment education for the prevention of heat disorders during long-distance running exercises will be necessary for a coach and athletes.

P218

Sports Nutrition

OBESITY AND SELF PERCEPTION OF BODY WEIGHT IN DIFFERENT SOCIO-ECONOMIC STATUS

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The objectives of this study were to assess the obesity and perception of subjects' body weight by themselves. From different socio-economic status, at ages of 15 and over, 564 men (46.7 %), 644 women (53.3 %) of 1208 volunteer had participated. The questionnaire was adapted from the IEFES-EU (Institute of European Food Studies-1999) survey. Body mass index (BMI) of 35.8 % of the men and 25.2 % of the women were between 25-29.9 (over weight), 8.0 % of the men and 21.4 % of the women participants were obese and their body mass index were 30 and over. It is found that there was an increase in BMI with regard to the decrease in socio-economic status among women, and the difference was found statistically important ($p < 0.05$) except medium and high socio-economic status. The percentages of waist to hip ratio (W/H) exceeding the normal values (W/H : >1 for men; >0.8 for women) were 6.4 % (men), and 48.4 % (women). It was found that 21.5 % of the men and 33.5 % of the women had stated their wish to loose weight. While the men were trying to loose weight by exercise and physical activity (43.8 %), the women were trying to loose weight by dieting (40.7 %). For the assessment of self perception of body weight, body figure charts were used. It was seen that 50.9 % of the men and 25.6 % of the women had assessed their own weight less than the real value, 11.5 % of the women and 7.8 of the men had assessed their own weight more than the real value. Based on the comparison between calculated BMI and the figure matched BMI that they wish to have been, 72.3 % of the men and 65.7 % of the women wanted to have less weight, and 6.2 % of the men and 4.0 % of the women wanted to have more weight than they had. In this study it is found that obesity is a big problem especially for women in low socio-economic status, and they were dieting more than men to loose weight. Besides, the men expressed their weight less than they have and the women had a more realistic approach towards their weight.

P219

Sports Nutrition

THE EFFECTS OF CREATINE LOADING ON THE PERFORMANCE OF AMATEUR SOCCER PLAYERS

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The purpose of this study is to determine the effects of creatine loading on performance of amateur soccer players who were given 20 gr of creatine on a daily basis in period of 5 days.

In this study, 21 volunteer male soccer players of A.I.B.U. (Abant İzzet Baysal University) who were 22.71 ± 1.90 average years old participated. While the anaerobic power values of the subjects

were determined by using the Margaria Anaerobic Power Test, agility performance is measured by Illinois Agility Test. After initial measurements, subjects were randomly assigned into three groups; (1) creatine, (2) placebo and (3) control. Both the creatine group and the placebo group were received the same amount ($4 \times 5 = 20$ gr.) of creatine and sugar powder supplement respectively. On the hand, the control group did not received anything.

The statistical analyses of the study included descriptive statistics, Wilcoxon, Krukal-Wallis and Mann-Whitney U tests. The results of the study indicated that total body weights of creatine group increased significantly from pre-test ($\chi = 74.62$ kg) to post-test ($\chi = 75.15$ kg) ($p < 0.05$). However, from pre-test to post-test, there were no statistical significant differences in total body weight of placebo and control groups. In terms of agility results of the groups, there were no statistically significant differences in the placebo and control groups, on the contrary; agility performance of creatine group was increased significantly from pre-test ($\chi = 17.02$) to post-test ($\chi = 6.73$; $p < 0.05$). These results were further discussed and elaborated.

P220

Sports Nutrition

EVALUATION OF THE INFORMATION LEVELS ABOUT ATHLETE NUTRITION OF SOCCER TRAINERS IN DENİZLİ

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Objective: The purpose of this study is to evaluate of the information levels about athlete nutrition of soccer trainers in Denizli city.

Method: Sixty-two soccer trainers, who had trainers' licenses in soccer trainers development course, participated voluntarily to this study. A questionnaire was prepared and applied by Authors to measure the information levels about athlete nutrition of soccer trainers. Data gathered by the survey was evaluated using SPSS (statistical Package for Social Sciences) computer program. Both, descriptive (Frequency tables, means and standard deviations) and inferential statistical methods (t-test and Analysis of Variances) were used. 0,05 significance level was accepted for this study statistically

Results: The trainers who participated to this study had %70 rate for true answers The results indicate that the rate of trainers whose ages were 32 ages and above was %75.8, the trainers who had trainers A-licence had more true answers, the trainers who had more levels of education had more information about athlete nutrition, the trainers who had worked more years had more true answers for questions in questionnaire. The trainers, who work as teacher, had more true answers than the other trainers who work in other occupation. Although rate of trainers who did not have information about athlete nutrition is %32.2, the rate of trainers who had enough information was %67.8. In this study, %32.2 of this group indicated that they got the information about athlete nutrition from the soccer trainers development courses.

Conclusion: Information levels about athlete nutrition of soccer trainers in Denizli city had more percent than the other soccer and volleyball trainers in different research prepared by the other researchers in different cities in comparable studies.

P221**Sports Nutrition****THE KNOWLEDGE AND LEVEL OF USE OF ELITE CLASS ATHLETES ABOUT ERGOGENIC AIDS IN SOME TEAM SPORTS**

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Objective: The aim of this study is to determine the knowledge and level of use of elite class athletes about ergogenic aids in some team sports (football, volleyball, basketball and handball).

Method: The subjects of this study are the voluntary male (n=239) and female (n=72) students who are elite class athletes from some team sports and whose calendar, sport and branch ages are, , 23.35 ±4.93 years, 11.75 ±4.83 years, 11.15 ±4.89 years (for male) and 21.28 ±3.34 years, 9.94 ±3.59 years, 8.69 ±4.02 years (for female), respectively.

Data were collected by administering a questionnaire. In the statistical analysis of the data, the frequencies and proportions were calculated.

Findings: It was determined from elite class athletes in football, volleyball, basketball and handball sport branches that; 67,6% of them had university education, 45,3% of them were national athletes, 54,3% of them had sufficient knowledge about ergogenic aids, 94,5% of them refrained from object and practises that might threaten their health even if they might contribute for them to reach greater achievements, 69,1% of them proved to be aware of psychological aids and 49,2% of them proved to be aware of nutrition and physiological aids.

Conclusion: As a result of this study, it can be said about elite class athletes, who played football, volleyball, basketball and handball that they have knowledge about ergogenic aids and they used some ergogenic materials and practices since they believed in the necessity and benefit of them.

P222**Sports Nutrition****TECHNICAL DIRECTORS OPINION AND THEIR DEGREE OF KNOWLEDGE ABOUT ATHLETE NUTRITION IN TURKISH REPUBLIC OF NORTHERN CYPRUS SOCCER SUPER LEAGUE (2003-2004 SEASON)**

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The purpose of this investigation is to fixate the degree of knowledge and opinions of technical directors who are working in Turkish Republic of Northern Cyprus soccer super league (2003-2004 season) about general basis, technical and principles of athlete nutrition.

Nutrition is; to take in, digest and absorption of the essential nutrients to body that are using in the activities of organism. No life can be without nutrition. Well-balanced nutrient can increase the general health and power efficiency. On the other hand, inaccurate nutrition style can affect general health and power efficiency negatively.

For this purpose, the population of this investigation is the technical directors of 10 soccer super league teams in Turkish Republic of Northern Cyprus ages between 22-33. The questionnaire composed of 39 questions, which reliability and validity are already, set applied to 10 technical directors that are actively working as technical director. Likert type 4-grade scale used for the matters related to the questionnaire and SPSS 10,0 statistical package used to analyze the data.

In this investigation, frequency (F) and percentage (%) were used to determine the sensitivity of TRNC Soccer Super League technical directors about well-balanced and efficient nutrition, the degree of knowledge about general basis, technical and principles of athlete nutrition and how effective of athletes about their own well-balanced nutrition.

When the results of technical directors who participated to questionnaire examined; proper answer were given to literature about subject of taking carbohydrate base nutrients before the game %60, the time of taking nutrients in pre-game %90, the amount of fluid that taken in last meal %90, about doping %60, the relation between muscle hypertrophy and protein %70, about dehydration %100 and about the nutrition types of weight gaining and weight loss %90. However they give improper answers to literature about using ergogenic materials, taking soccer specific fat ratio, using the simple carbohydrates and the effects of weight loss to performance.

P223**Technology****MATHEMATICAL MODELLING OF CRAWL STROKE SWIMMING**

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A three dimensional mathematical model for the crawl stroke swimming is developed in which the swimmer is modelled as a body and two arms connected to the body at the shoulder joints. Each arm is assumed to consist of three parts: upper arm, forearm and the hand. The two segments are modelled as circular cylinders and the hand is modelled as an elliptical plate. The case with no leg action is considered. The numerical results of the model are compared with the results obtained by experimental observations.

P224**Technology****TURKISH 1ST LEAGUE SOCCER TEAMS AND FOREIGN TEAMS TECHNICAL ANALYSIS OF COMPETITIONS**

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In this research, the matches including 6 teams in first division, 5 teams in foreign division were recorded by camera. Coordinative qualifications were analyzed within 90 seconds and selected parameters were recorded by using manual method. These pa-

rameters include ball possession, slide tackles, pass distribution, freekick, wing attacks, shot on goal and goals from each player during the game.

In order to assess the differences between teams in the Turkish 1st division and Foreign league teams, Independent "t" test was used for the parameters mentioned above ($P > 0.05$).

P225

Technology

THE ANALYSIS OF GOAL PASS AND GOAL KICK OF FENERBAHÇE, BEŞİKTAŞ, AND GALATASARAY IN 2003-2004

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The purpose of this study was to research bringing goal pass and goal kick of Fenerbahçe, Beşiktaş, and Galatasaray and to analysis of goal pass and goal kick of that at Türkiye 1st. Super League in 2003-2004.

Twelve each matchs of every soccer team,(Fenerbahçe, Beşiktaş, and Galatasaray) were watched in 2003-2004. A common data table was formed for every match. All data was gathered carefully by three person at Television. Trademark of Beko television, 55 screen, was used to analysis all match. All gathered data were analyzed by the SPSS for Windows, frequency analysis and percentage ratio were made.

At the end of research, goal pass is important for succes and being a champion. For this reason, all the soccer team have to be trained their player to give the goal pass at the century of soccer field.

P226

Technology

A KINEMATIC COMPARISON BETWEEN THE SEMI-FINALS AND THE FINALS FOR 50M SWIMMING RACES OF THE FOUR STROKES

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The purpose of this study was to identify the kinematical variables that had a significant effect on total time between Semi-finals and Finals for 50m races of the four strokes. Finalists who had their best total time registered at the Semi-finals were chosen as the subjects in this analysis and they were (44) swimmers. The term "negative swimmers" was given to these subjects. The kinematics variables used in this analysis were: total time(TT), start time (ST), free swimming speed (Av.V), last 5m of the race (5m Fin.), first half swimming speed(V1), second half swimming speed (V2), stroke length (SL) and stroke rate (SR).Results revealed that the most kinematical variables that might affected the (TT) were SR, SL and V2. An attempt of explaining the improper combination between SL and SR through the second half of the race was stated.

P227

Behavioral Sciences

SPORTS LAW AND INTERNATIONAL COURT OF ARBITRATION FOR SPORT (CAS)

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Today increasing the interest on sport, importance of being profession in sport and economic values in sport take the question "how does the sport process?" and the various lawful disagreements in sport.

Sport Law; although being a part of specific law, the specific features of sport events, finds the reflection in law regularity as original problems.

In this study, the literature concerning the "Sport Law" and "International Court of Arbitration for Sport" are reviewed. The purpose of the study to investigate the structure and process of the "Court of Arbitration for Sport" and to get the interdisciplinary concept "sport" into the "law" as a discipline and adding references to related literatures.

As a result of this study, it could be said that "Court Arbitration for Sport" plays an effective role to regulate the relations of athletes with other athletes, sport organizations, sport clubs, sport federations, referees, managers and those with each other.

P228

Health and Sports

THE EFFECTS OF MULTIPLE INTELLIGENCE ACTIVITIES ON THE ACHIEVEMENTS OF STUDENTS' COGNITIVE AND PSYCHOMOTOR BEHAVIORS FOR LEARNING VOLLEYBALL AND GYMNASTICS UNITS

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The purpose of this research is to compare the effectiveness of the physical education and sport lessons between multiple intelligence and traditional method. The data was collected in the seventh grade students in a primary school. Experimental model was used in this research. There were two groups: experimental and control. The experimental group participated in volleyball and gymnastic units by means of using multiple intelligence activities and the control group participated in the same units by means of traditional whole class teaching and style A (command style). The experimental group is made up of 9 girl and 10 boy and the control group is made up of 11 girl and 7 boy. The average age of experiment group was 13+0.33 and control group was 13.33+ 0.59. During the study, both groups were given a course which lasted 11 weeks. Volleyball achievement tests for cognitive behaviors in volleyball and gymnastics units and observation forms were used to measure the motor performances in volleyball and gymnastics units. These instruments were used and given to all the students both at the beginning of the each units (pre-test) and at the end of the each units (post-test). SPSS for Windows programme was used and descriptive statistics, Mann-Whitney U and Wilcoxon tests were used. The results showed that there was a significant improvement in both experiment and control group in cognitive and psychomotor domains. When the cognitive and psychomotor scores of experimental group and control group were com-

pared, there was no significant difference between them except back somersault skill. This means that, multiple intelligence activities and traditional whole class teaching create the same effect on students' cognitive and psychomotor domain.

P229 Movements and Training

THE EVALUATION OF THE ELECTROCARDIOGRAPHY AND ECOCARDIOGRAPHY FINDINGS IN ATHLETES

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The purpose of this study was electrocardiographic (ECG) and echocardiographic (ECHO) evaluation of cardiological parameters of elite male athletes. At the same time we have investigated if the evaluation of left ventricular hypertrophy by ECG findings is supported by the ECHO results.

Fourteen male runners (21.46 ± 3.59 years old and 5-15 years of training age) (n=5 short, n=5 middle, n=4 long distance) participated in this study. ECG and ECHO measurements were taken in resting supine position. Sokolow index was used in order to determine left ventricular hypertrophy (LVH) in ECG. The parameters of left ventricular end diastolic diameter (SVDD), interventricular septum (IVS) and left ventricular post wall thickness (LVPWT), were determined by using ECHO.

P230 Health and Sports

THE GEOGRAPHICAL FACTORS HAVE INFLUENCE ON SPORT AND AS A RESULT OF THIS, THE VALUATION OF THE SPORT ACTIVITIES APPEAR IN ÇANAKKALE

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When Çanakkale's geographical and sportive situation is investigated it is understood that it has an important specialty for Turkey. At the same time Çanakkale has the most important locations in the visions of strategic, economic, political, ecologic etc. It is on the way of Asia and Europe motorway connection the countries by black sea region and indirectly by Tuna river canal. All these positive conditions affect sportive facilities in such good ways. In the investigation data, official offices data's were preferred some information take from official offices were firstly used. And also information related to ecosystem were updated. In the ecosystem whose perspective was down the present situation was evaluated and conclusions and suggestions were given. The information collected from studies was evaluated by the method of why and result. With this kind of study, it is thought that it can be a data base for studies in front part.

P231 Behavioral Sciences

SOMATOTYPE CHARACTERISTICS OF NATIONAL LEVEL TURKISH ATHLETES

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Subject: The purpose of this study was to evaluate the somatotype characteristics of national level Turkish athletes.

Method: Body weight, height, 4 skinfold thicknesses (triceps, subscapula, supraspinale, medial calf), 2 girths (arm flexed and tensed, calf), and bone breadths (humerus and femur) were measured from 126 national female athletes (aged 17.7 ± 3.4 years) and 169 national male athletes (aged 20.6 ± 3.6 years). All antropometric data were measured according to Anthropometric Standardization Reference Manual (Lohman ve ark., 1988). Athletes' somatotypes were estimated according to the Heath/Carter anthropometric somatotype method (Carter, 2002). Discriminant analysis was used to compare the groups of athletes.

Results: The mean somatotype was 2.9-5.2-2.1 (endomorph-mesomorph) for the male athletes. Wrestling (3.1-6.7-0.9), sailing (3.0-5.8-1.7) and handball (3.3-4.6-2.4) had endomorph-mesomorph somatotype, skiing (alpine) (2.4-4.6-2.3) and gymnastics (2.2-5.4-2.4) had balanced-mesomorph somatotype, basketball (2.7-2.9-4.5) had balanced-ectomorph somatotype, track and field (2.2-4.0-3.1) and skiing (nordic) (2.0-4.1-2.9) had ectomorph-mesomorph somatotype. Archery (3.5-3.9-3.1) had central somatotype. The discriminant analysis showed that 95.4% of the wrestling, 63.2% of the basketball, 64.0% of the handball and 60.4% of all male athletes were correctly classified in their respective sports.

The mean somatotype was 3.7-2.9-3.0 (balanced-endomorph) for the female athletes. Sailing (4.8-3.6-2.1) and handball (3.9-3.2-2.5) had mesomorph-endomorph somatotype, archery (4.4-2.9-2.8) and basketball (3.7-2.8-3.1) had endomorph somatotype, skiing (alpine) (3.0-4.0-2.6) and skiing (nordic) (2.6-3.5-2.5) balanced mesomorph somatotype, and volleyball (3.5-2.5-3.4) had endomorph-ectomorph somatotype. Taekwondo (2.9-2.8-3.1) and track and field (2.8-3.3-2.6) had central somatotype. The discriminant analysis showed that % 78.6 of the basketball, 52.9% of the track and field and 36.5% of all female athletes were correctly classified in their respective sports.

Conclusion: The results of this study indicate that mesomorphy component in national level male athletes and endomorphy component in national level female athletes were dominant.

P232**Behavioral Sciences****THE COMPARISON OF PHYSICAL EDUCATION TEACHERS IN FORMAL AND PRIVATE SCHOOLS IN TERMS OF THE BEHAVIOUR OF LEADERSHIP (THE DIMENSION OF ESTABLISHING THE STRUCTURE)**

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It's real that all people know that Physical Education teachers, having an important career in contemporary and in our daily life, the behavior of leadership at their schools and surroundings they live in. P.E. has remarkable importance without ignoring sex, age, race, religion and language in terms of individual agreement, social concensus dealing with international relationship and providing unity. So the most important characteristic that P.E. teachers should have, is that they express the behaviour of leadership in terms of the dimension of establishing structure. The leader is a person who identifies the aims of the society or association they belong to and can lead the association and society in a most efficient way in making these aims come true.

Therefore the purpose of this study is to find out whether the teachers in Private and Public Schools have the differences in showing the dimension of establishing structure in terms of informing the future generation about education, training, social life and contribution to their developments of personality directly.

Data is provided from thirty articles (The questionnaire of finding out leadership behaviour LBDQ) made up of leadership behaviour including the dimension of establishing the structure and understanding. However the first 15 questions including the dimension of establishing structure have been evaluated in this questionnaire. The search was carried out according to the data obtining from 222 P.E. teachers, 181 of whom working at state schools and 41 of whom at private schools and this questionnaire was practised in 145 schools, 116 of which are state schools and 29 of which private schools in 2001-2002 academic year.

Data obtained was resulted with the help of frecans, percentages and averages. It was tested with the help of "t" questionnaire having 0.05 importance level whether the teachers in public or private schools have different practical opinions or not. In conclusion of the analyses, P.E. teachers have often had different opinions on the dimension of establishing the structure at leadership behaviour, meanwhile they agreed on some questions but they disagreed on the rest of questions.

To sum up, All P.E. teachers should be a leader in their schools or environments and exhibit the leadership behaviour meaningfully. Moreover they should communicate with their executives, colleagues and students in a good way to be able to form the dimension of establishing structure and they should also create contemporary education, training atmosphere to be able to catch up with the necessities and fargets of the modern age in a triangle of affection, respect, responsibility.

P233**Behavioral Sciences****THE STUDY OF THE OPINIONS OF STUDENT ATHLETES ABOUT THEIR MAKING USE OF COUNSELING SERVICES OF UNIVERSITIES**

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The purpose of this study is to examine the opinions of student athletes who are having education at universities.

For this reason, related literature has been scanned and necessary information has been provided related to study problem. This study has been done in order to identify the current situation in survey model through questionnaire this study is limited with the state universities of YÖK (The Higher Education Council). The sample group consists of licenced student athletes having education at Gazi University, Marmara University, Selçuk University, 19 Mayıs University, Atatürk University, Fırat University, Gaziantep University, Akdeniz University, Celal Bayar University and Çanakkale 18 Mart University. 603 students athletes (380 Male and 223 Female) have participated to the study.

Obtained data in this study has been shown with frequency, percentage tests and according to the significance level of the choices.

Depending upon the findings of the study, the summary of the results is as follows;

The student athletes who participated to this study are licenced sportsmen and sportswomen having education at universities. Most of the students paticipated in this study have explained their views about making use of the counseling services at universities as whether they solve their problems by themselves (59%), or they don't know how to get information on counseling services (22,6%). Or they don't believe in counseling (19,2%).

P234**Movements and Training****ATTITUDE OF STUDENTS, WHO ARE ENGAGED IN SPORTS AND WHO ARE NOT, TOWARDS PHYSICAL EDUCATION AND SPORTS**

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This research was conducted to detect and compare the students attitude towards physical education and sports, who are engaged in sports and the ones who are not, in the central districts of Ankara and being educated in primary schools, high schools and universities. The research included 2630 students (376 girls and 415 boys from 8th grade, 321 girls and 322 boys from 9th grade, 235 girls and 207 boys studying at universities and havig elective physical education courses, 112 girls and 128 boys engaged in sports from primary schools, 84 girls and 178 boys from high schools, 150 girls and 102 boys having physical education courses and studying at Hacettepe Uni. Fac. of Education Primary School Teaching Department.) In the evaluation of students attitude, Physical Education and sports

Attitude scale which contained totally 24 items (12 positive, 12 negative) and developed by Demirhan and Altay (2001) was used. The Cronbach Alpha reliability coefficient of the scale was calculated as 0,93 and scale validity was 0,83. In the analysis of the data, two-way anova was used for the independent groups. The signification level of the data was 0,05 and tukey Test was used to detect which group caused the difference. according to the research findings, all the groups attitude grades were quite high and there was significant statistical difference among the groups, with respect to the gender and education levels of the students.

P235 **Movements and Training**

THE COMPARISON OF KINEMATIC PARAMETERS DURING THE THROWING PHASE IN ELIT AND SUB-ELIT JAVELIN THROWERS

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The aim of our study is; the determination of javelin thrower's (elit and sub-elit) 3-dimensional release parameters, to determine important numerical kinematic features by javelin throwing's release parameters and to form the profile values in javelin throwing.

In our study, 10 javelin throwers (5 elit, 5 sub-elit) were used. Carrying and throwing phases of javelin throwing technique were observed.

In this study, 3-dimensional videography method was used. 3 high speed and working synchronizedly (100 hz speed) cameras were used. The shots taken from cameras were transferred to the computer directly. Kinematic analysis of acquired data were done by using SIMi Motion 6.2 program.

On the phase of javelin throwing; significant differences were found on the body's angular wideness and speed ($p < 0,05$). Significant differences were found in the angular speed of arm's horizontal plane, in the angular speed and acceleration of arm's sagittal plane ($p < 0,05$). Significant differences were found in the angular speed of forearm's horizontal plane, in the angular wideness of forearm's horizontal plane, in the angular wideness, speed and acceleration of elbow's sagittal plane ($p < 0,05$). Significant differences were found in the angular wideness and acceleration of javelin's horizontal plane. Significant differences were found in the angular speed and wideness of javelin's sagittal plane ($p < 0,05$). Significant differences were not found in the angular speed and acceleration of javelin's horizontal plane; in the angular speed and wideness of javelin's frontal plane; in the acceleration of javelin's sagittal plane ($p > 0,05$). Significant differences were found in the angular speed of shoulder and in the angular speed of elbow ($p < 0,05$).

As a result what provides advantage is to achieve the throwing movement by getting the arm to hiperextension in sagittal plane for the optimal throwing distance.

P236

Behavioral Sciences

BIOMECHANICAL ANALYSIS OF THE OVERARM THROW TECHNIQS IN DIFFERENT BRANCHES

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Objective: Optimal usage of the energy and transformation of this energy into force can be increased by scientific studies. The aim is to analyze the techniques of the movements and achieve the highest level.

The aim of our study is to compare the kinematic analysis of the overarm throw in different branches. The other aim of this study is to form profile values for the over arm throw techniques in these sport branches. So its results will help other people's studies.

Methods: 11 elite female handballers from Turkish national Handball team and 9 elite female volleyballers from Kocaelispor were selected as subjects. The backswing and acceleration phases of the volleyballers' spike and Handballers' jump shoot were researched 3-dimensional videography technic were used to in this study. Two cameras of 50 Hz were used to shoot the athlete's movements and the calibration of the field was achieved by DLT method. The frames were transferred from video to the computer and by using Simi motion 5.5 programme, kinematic analysis were done.

Discussion and Result: In the back swing phase, it was found out that there were significant differences at the angular wideness, angular speed and angular acceleration on the volleyballers' and Handballers' xy axis or on the transvers plane of the motions ($p < 0.01$). Extension motion on the volleyballers' back swing phase is vertical, but handballers' were horizontal. For this reason it is usual that Handballers' arms have bigger motion angle. On vertical plane or on xz and yz axis, significant difference was found statistically on the forearm's angular wideness, speed and acceleration ($p < 0.05$). On acceleration phase, significant difference was found statistically on the angular wideness of the arm segment's motion on volleyballers and Handballers ($p < 0.05$). The angular wideness of the motion is higher on volleyballers. On sagittal plane, significant difference was found that Handballers' arm motion's angular wideness, speed and acceleration are more than that of the volleyballers ($p < 0.05$). It is occupied with the fact that volleyballers use vertical flexion more, so it increases the time to gain the speed. Handballers transfer the speed used in horizontal flexion to the vertical flexion in a short period of time.

The spike and jump which were defined on volleyballers' and Handballers' high arm throw techniques, may be seemed similar to each other, but if spike realises according to the high arm throw, we can understand that the difference acquires from this. To create a high acceleration by the correct technique in two of them, it was some results.

P237

Management and Organization

TURKISH WOMEN IN GERMANY, SPORT AND MODERNIZATION

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Aim: The aim of this research is empirical and discusses typology analysis of the Turkish women who are members of Turkish Culture Associations that join sport activities in the associations where they are members.

Method: The research was performed between the 2003-2004 years in Cologne, Germany. 106 Turkish women who are active members in different Turkish Culture Associations and whose age average is 34.38 participated in this research. An application of written survey with 35 questions was performed in this research.

The typical classification of the women who participated in this research performed according to the age, geographical region where the childhood were passed, native language, marital status, number of children, occupation and monthly salary of the women.

Except the biographical data, which is important for this research, such as the level of weekly participation level in sport activities in the cultural association of which they are members and necessity of getting permission from a male member of the family in order to participate in these activities, were also taken into consideration. The coefficient confidence of the results was assumed to be 0.95 ($=0.05$), which was valid for social sciences.

Result and Discussion: The age of the women of Type 1, 2 and 3's modernization levels respectively show a quite close relevance with each other. If the modernization theory is assumed as basis, it is possible to see clearly that the first generation women (type4) carry more traditional manner compared with the women who are not married and have a career (Type1), when they are compared according to data of educational level, income, level of German knowledge, personal income and the rate of dependence on a male member of the family.

This study validated the hypothesis given at the beginning of the research. Turkish women take place in sport and bodily activities despite the cultural, religious and traditional differences, but realization of this phenomenon depends on the structure that will be prepared by considering the cultural, traditional and religious approaches.

By considering the most important fact is that it can provide social and personal integration of the Turkish women by means of sport and bodily activities, provided in cultural associations. It is an urgent necessity to support the culture associations with the budget that is spare from the general sport and health system, and to develop a general control mechanism.

P238 Movements and Training

COMPARISON OF SQUAT AND COUNTER MOVEMENT JUMP HEIGHTS AND POWER SCORES OF ELITE ATHLETES

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Subjects: The aim of this research was to compare the squat jump (SJ) and counter-movement jump (CMJ) heights and power scores of elite sport participants from different sports. Four hundred fifteen (415) elite sport participants (males = 235 and females = 180) from different branches (Track and Field (Sprinters), Basketball, Boxing, Gymnastics, Handball, Mountaineering, Taekwon-do, Volleyball and Wrestling) were voluntarily included in this study (Male age $x = 21.64 \pm 3.90$ years; weight $x = 76.59 \pm 15.41$ kg; height $x = 177.92 \pm 11.19$ cm; Female age $x = 17.68 \pm 2.63$ years; weight $x = 63.98 \pm 8.05$ kg; height $= 173.11 \pm 8.62$ cm).

Method: Measurements were taken during the national team preparation camps between 1993-2004 years. They were tested

for their dynamic explosive force by asking them to perform jump test (SJ or CMJ) on a mat. Bosco Ergo Jump was used to calculate the jump heights. Power (watt) were calculated according to Harman (1991) and Sayers (1999). Three maximal jumps were recorded for each test condition and the best performance was used for the statistical analysis. Results are expressed as means and sd. Comparison among sport branches were examined by using variance analysis (ANOVA) with a significance detected at a level of $p < 0.05$. Scheffe's post-hoc test was used to analyse if any significant difference occurred.

Results: There were statistically significant differences between jump heights and power scores of male subjects ($F_{SJ} = 16.850$; $F_{CMJ} = 15.963$; $F_{SJP} = 8.131$; $F_{CMJP} = 8.885$; $p < 0.01$) and according to the post-hoc tests results differences for SJ and CMJ (cm) were mainly attributed to the higher jump heights of track and field (sprinters) and volleyball players, respectively. Differences for power scores (watt) were mainly attributed to the lower power values of the gymnastic and boxing, respectively. There were statistically significant differences between jump scores and powers of female subjects ($F_{SJ} = 20.730$; $F_{CMJ} = 14.179$; $F_{SJP} = 17.707$; $F_{CMJP} = 18.327$; $p < 0.01$) and according to the post-hoc tests results; track and field athletes and handball players were produced high SJ and CMJ scores (cm). When power were calculated mountaineering and taekwon-do athletes were produce significantly less power according to their weights.

Conclusion: When jump heights were considered male sprinters and volleyball players were jumped significantly higher but according to the power values there were no significant differences among sprinters, basketball, volleyball, handball players, taekwon-do, mounteers and wrestlers. Again female sprinters were produced significantly high jump values but when power values included, there were statistically no significant differences among sprinters, volleyball, handball, basketball players.

P239

Health and Sports

ANTHROPOMETRIC SPECIFICATIONS OF THE MALE ELITE KARATE SPORTSMAN

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In this study, the aim was determination of the anthropometric specifications of the male elite karate sportsman. 17 elite junior and senior karate sportsmen who joint the European and World Championships have included to this study. The measurements have only one stage and done in Bayrampaşa Sports Complex belonging to Istanbul Municipality. In these measurements, the diameters, circumferences and the under skin fats of the sportsmen have been measured.

The average measurements of the sportsmen are; humerus diameter 9.16 ± 0.52 cm, femur diameter 12.01 ± 0.56 cm, acromion diameter 43.10 ± 1.52 cm, bitrochanter diameter 35.40 ± 1.06 cm.

The average circumference measurements are; shoulder 115.67 ± 7.02 cm, chest 96.00 ± 6.38 cm, breast in respiration 100.82 ± 6.66 cm, belly 79.65 ± 6.85 cm, femur 51.58 ± 12.70 cm, knee 37.20 ± 2.72 cm, calf 36.67 ± 2.94 cm, ankle 22.17 ± 1.40 cm, arm 26.91 ± 2.27 cm, wrist 17.00 ± 1.04 cm, biceps 129.05 ± 3.02 cm, biceps 232.47 ± 3.06 cm.

The average skin thickness of the sportsmen are; subscapula 9.40 ± 2.72 mm., biceps 3.29 ± 0.47 mm, triceps 6.47 ± 2.64 mm, chest 6.03 ± 1.66 mm, subrailiac 7.81 ± 2.41 mm, abdominal 8.58 ± 3.16 mm, thigh 8.72 ± 3.31 mm, calf 7.62 ± 1.95 mm. These body fat measurements are calculated by Yuhansz formula and the averages are between 10.71 ± 1.44 mm.

P240 Health and Sports

ANAEROBIC POWER AND FLEXIBILITY AND REACTION TIME OF ELITE KARATE SPORTSMAN

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In this study, the aim was determination of the motor specifications of the male elite karate sportsman. 17 elite junior and senior karate sportsmen who joint the European and World Championships have included to this study. The measurements have only one stage and done in Bayrampaşa Sports Complex belonging to İstanbul Municipality.

In this study, horizontal jump, two feet long jump, sit-reach test and the reaction time are applied. The average horizontal jump measurements are 67.21 ± 6.70 cm, the average two feet long jump measurements are 222.14 ± 16.94 cm. the aerobic force value of by Lewis Monogram is 131.41 ± 21.30 kg and the value of flexibility is 43.47 ± 8.58 cm. and auditory basic reaction time value is 195.20 ± 41.27 ms., and the choose reaction time value is 299.67 ± 62.90 ms. As a result, in karate sports these values showed that the sportsmen's reaction times are fairly low and their need to improve their reaction times.

P241 Health and Sports

THE BIOMECHANICAL ANALYSIS OF THE FREE THROW ACCORDING TO THE CLASSIFICATION IN WHEELCHAIR BASKETBALL

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Introduction: The aim of our study is to do the kinematic analyse of the successful free throws of the wheelchair basketball players determined by IWBF classification who has low (1-2 point) and high marks (3-5 point) and to define the difference between there groups.

Methods: 9 players from Young National Team and 7 from A National Team were used. Carrying out strength in free throw and phases of the ball's release from hand were studied. Three dimensional videography method was used in this study. 3 high speed and synchronized to each other cameras (their speed was 100 Hz). Were used to record the players. The scenes were loaded from the camera to the computer directly. The kinematic analysis was made from images by using Simi Motion 6.2 programme.

Results: In segment movements; significant differences were found between the group 1 and group 2 according to the angular wideners, speed and acceleration values of movements in sagittal plane (the arm segment's yz axis) ($P < 0,05$). In sagittal plane angular speed and angular acceleration values (hand segment's yz axis) i significant difference was found ($P < 0,05$). Segment move-

ments during the shot phase in free throw technique, the high of the ball and release angle are very important. The group, who had high marks, had much more height and significant difference was found statistically between 2 groups ($P < 0,05$). Shouting phrase in segment movements, significant difference was found between angular wideness and angular speed values in sagittal plane (arm segment's yz axis) and forearm segment's angular speed ($P < 0,05$). Significant difference was found in all values of the body segment's angular wideness, angular speed and angular acceleration in transvers plane (body rotation is realized in xy axis) ($P < 0,05$).

Discussion: Although shooting from wheelchair is more difficult than shooting normal basketball, the difference in shooting rate is because of the shooting style. As shooting style, which depends on the decreasing of highness and not supported by the feet, has been improved.

In studies which were obtained from the scientific research that are few, scientific approach about shooting mechanical disability's handicap rate, within the help of biomechanical approaches, if contributes to improve the new techniques. Thus improvement will be obtained in every level of the disability group's free throw performances.

As a result; the players who have low marks have high shoulder angle and the players who have low marks have high elbow and wrist angles.

P242 Health and Sports

AN INVESTIGATION ON THE INJURIES OBSERVED UNDERWATER RUGBY PLAYERS

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The interest on the Underwater rugby (UWR) tournaments in Turkey which has been organised by Turkish Underwater Sports Federation are increased in recent years. Since UWR is a kind of physical activity based on contact and tackles underwater, safety is of great importance in the UWR., a statistical analysis on observed injuries of female and male UWR team players and some preventive comments related to injuries were presented in this study.

P243 Health and Sports

EFFECT OF HIGH SPEED RACE LOAD ON SUDDEN CHANGES OF SOME HORMONES

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In this study, our objective was to assess the influence of sixty-meter speed running as applied once with maximal load on sud-

den changes in the levels of total testosterone, growth hormone, cortisone and insulin.

Twenty-two healthy male students aged from 18 to 23 years who were attending to Physical Education and Sports Highschool were included in the study. Sixty meters speed running test was applied to the subjects only once in a dust running track. For hormone measurements, fasting blood samples were obtained from the subjects both before and after the race, and centrifuged in 30 minutes. Hormone level in the serum was measured using electrochemiluminescence method. The results were given as means and standard deviations. The physical and physiological features of the subjects were evaluated with relevant field tests before the race. In order to evaluate the difference between the mean values obtained before and after the race, dependent samples (paired t test) test was applied.

Before the race, the serum levels of total testosterone, growth hormone, cortisone and insulin were $7,13 \pm 2,13$ ng/mL, $13 \pm 0,94$ ng/ml, $15,67 \pm 4,66$ µg/dL and $5,51 \pm 2,94$ µIU/mL, respectively. After the race, the serum levels of total testosterone, growth hormone, cortisone and insulin were $7,53 \pm 2,17$ ng/mL, $1,80 \pm 1,40$ ng/mL, $15,06 \pm 4,46$ µg/dL and $4,41 \pm 2,57$ µIU/mL. In conclusion, sixty-meter speed running as applied once with maximal loading causes a significant increase in the serum total testosterone level ($p < 0,01$) and decrease in serum insulin level ($p < 0,001$) after the race. Although the level of growth hormone increased after the race, this increase was not statistically significant ($p > 0,05$). Serum cortisone levels measured before and after the race were not significantly different ($p > 0,05$). There was a substantial increase in the mean hematocrit level after the race ($p < 0,001$). Short distance speed race caused sudden change in the serum level of some hormones. As a result of the physical activity, water loss occurs in the body, which in turn may lead to a decrease in the plasma volume. It was concluded that serum testosterone and insulin levels change in a sudden and substantial manner while cortisone and growth hormone levels do not change after sixty-meter speed race applied once with maximal load.

P244 Health and Sports

PHYSICAL FEATURES AND ITS RELATIONS TO PERFORMANCE OF 17 AND UNDER 17 AGED TURKISH NATIONAL BADMINTON TEAM PLAYERS

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In this research; some physical and physiological characteristics of National Badminton Team (9 girls and 11 boys) were measured and their relations with each other were determined. Movement analysis of single men and single women final matches and physical values were related to each other and it was tried to get physical profile of a badminton player.

Physical measurements were as follows; flexibility, vertical jump, balance, sprint, one step length, reaction tests (right hand, left hand and both hands). The results were evaluated separately for girls and boys.

The results of the measurements were evaluated by SPSS for Windows Packet Program With arithmetic average and Standard deviation. Pearson correlation was used for relation of physical features. Match analysis were done by watching the match from video and writing down to paper.

There were significant relationship between weight and height, flexibility and balance, balance and sprint in U-17 women national Badminton Team. And there were also significant relationship between weight and height and vertical jump, height and vertical jump, balance and one step length, sprint and right hand and both hands reactions.

In evaluation of results; weight and height effects some biomotor parameters, importance of flexibility. Over flexibility has negative effects on turning and sprint parameters in the game. It was observed that vertical jump was important in smash technic that is important and used frequently. The wanted result was that balance and sprint were related with each other. To make a controlled hit after sprints required the balanced movement.

P245 Management and Organization

RECREATION ACTIVITIES OF THE EMPLOYEES WHO ARE WORKING IN İZMİT CITY MUNICIPALITY, THE REASONS TO TEND TO THESE ACTIVITIES AND THE BENEFITS OF THEM TO THE INDIVIDUAL

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This study aims to find out how the employees of İzmit Metropolitan City Municipality in Kocaeli province spend their leisure time, what opportunities the municipality provides to its personnel, the effect of leisure time activities on the efficiency at work and the level or personnel's awareness and consciousness in terms of ways to spend the leisure time.

The universal of the research is made up of the 1300 people working in İzmit Metropolitan City Municipality. 1067 people (%82) answered the questionnaire.

In the research, data and frequencies has been tabled as percentage.

As a result, it has been obtained that the employees have enough free time, they have passive activities in their free-time. Because of the inclining to the free time activities are, to develop the interest domains, desire to be with friends, to effect their health in a positive way. We understood that these activities make people feel good, make them happy, save them from stress and monotony, to manifest their feelings, to learn how to use the time, to activate, revitalise the body and mind, to learn new things, to get a good social relationships.

P246 Movements and Training

STUDYING OF THE RESULTS ACCORDING TO THE HITTING AND FALLING POINTS OF SERVICE STROKES IN THE INTERNATIONAL WOMEN TENNIS TOURNAMENT

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¹ Ilke Software

The aim of this research is determining the effective areas for tactical training by studying of the results, hitting and falling points of the service strokes in tennis sport.

The results according to the hitting and falling points of service strokes in the quarterfinal, semifinal and final matches of the two international women tennis tournament established in

Istanbul are observed and studied in this research. 6 matches as quarterfinal, semifinal and final matches, are recorded and these recordings are transferred to computer and data is evaluated and edited by Ms Excel software. Data is divided into groups as service stroke, left and right stroke, 1st and 2nd services, hitting points, falling points and results. And the tennis field is divided into three parts for the service stroke both in hitting and falling points.

As a result, strokes were done in the middle of and the exterior side of the service box, the reason of the %75 rate of the 1st service hittings are because of the %54,7 of the net fault. The tennis players, who use the middle court at the rate of %55, have no match experience and it is realized that they use the guaranteed strokes in 2nd service. Because of service strokes' hitting and falling points aren't enough for the match analysis and changing the game during the match, doing the analysis' concepts by expanding them has been concluded.

P247

Health and Sports

THE EFFECTIVE FACTORS TO DO SPORTS IN THE MORNING

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The aim of this study is to find out which factors are effective to choose sports. (do exercises in the morning) 270 people were used during this study who are living in Kocaeli (centre) and one of its towns (Körfez).

A questionnaire was applied to these people. The data was shown with graphics.

As a result, the reasons to do sports in the morning are weight problems, TV programs, advice of friends, spreading of the activities, the doctor's advice, environmental factors, newspaper, the effect of the family and the magazine articles.

The effective factors to do sports in the morning permanently are found as training areas, the distance of the area, time, to be done by the help of a specialist, weather conditions, volunteer and government services. To do sports in the morning provides physical liveliness, psychological relaxation, to put and to the health problems and to get a social environment.

P248

Management and Organization

THE REASONS THAT HINDER THE SPREADING OF THE SPORTS TO THE LOWEST GRADE

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The aim of this study is; to research the reasons that hinder the spreading of the sports to the lowest grade.

274 managers from general office of youth and sports were used in this study. These people were from general director and his/her assistants, department directors, section directors, federation directors, general secretaries of federation, city directors and section directors in city office.

The data was collected together with the help of questionnaire and they were figured. Frequency, percentage and x2 technique at the meaningfulness level of 0.5 were used in this research.

As a result; the managers believe that "sports level is; to spread sports to the public." The organizations aren't sufficient enough to make people join them. The reasons that hinder the sports to spread to the lowest level are; economics, rules, insufficient infrastructure (place, materials, personnel) insufficient organization and education, short-term plans performance sports is wanted to be taken priority. When we look at the relationship between the tables, we found that there is a relationship between sports spreading to the lowest level and success, education level and sports level, age and sports level. It wasn't found any relationship between gender and spreading sports to the lowest grade.

P249

Movements and Training

THE COMPARISON OF PHYSICAL SUITABILITY PARAMETERS OF THE FIRST TEAM WITH THE LAST TEAM IN İSTANBUL YOUNG WOMEN'S LEAGUE

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Objective: Comparing the physical and the physiological distinctions between the first team's players and the last team's players of Young Women's Basketball League in Istanbul.

Methods: From the first team and the last team, 24 sportswomen between the age of 16-18, volunteered to join this research. Some physical suitability parameters and respiration function tests are applied to sportswomen.

Results: According to measures, the waist and the hip round lengths of the last team is $73,4 \pm 9,5$ cm / $97,2 \pm 11,1$ cm and $82,6 \pm 6,5$ cm / $104,1 \pm 3,6$ cm for the first team. The first team's high values are determined meaningful as statistical (in turn in order $p:0,014$; $p:0,049$). The results of the squat down test to measure endurance is found highly meaningful as statistical in first team's favour ($p:0,0001$). In our research, body lateral flexion and body hyperextension by the flexibility tests and vertical jumping values for the power tests are determined highly meaningful in first team's favour (in turn in order $p:0,005$; $p:0,001$; $p:0,0122$).

Conclusion: In our research, endurance, flexibility, speed, power and agility results of the physical tests for the last team are better. It is found that the results of the respiration function test of the last team's are better than the first team. Besides, it is recorded that the Body Mass Index (BMI) parameters of the last team's are higher and this team's periods of exercises are longer. As a result we think all these factors play an important role in the success of the sportswomen and these tests are very useful to determine the condition frequently.

P250**Behavioral Sciences****EFFECTS OF GENDER AND GOAL ORIENTATION ON COMPETITIVE ANXIETY*** F. Zişan Kazak* Ege University, School of Physical Education and Sports

The purpose of this study was to investigate the influence of goal orientation and gender on competitive anxiety of athletes. The participants were 111 female and 126 male athletes aged 21.81 ± 2.51 yrs, performing in a wide variety of sports. "Task and Ego Orientation in Sport Questionnaire –TEOSQ" for determining goal orientations and "Competitive State Anxiety Inventory- CSAI-2" for determining competitive anxiety were administered to subjects. A $2 \times 2 \times 2$ (gender, task high and low, ego high and low) MANOVA revealed no interaction for gender, ego orientation and task orientation. However, main effect emerged for gender. Post hoc analyses of the simple main effects found that male and female were different in competitive anxiety.

P251**Management and Organization****ATHLETISM AND ATHLETISM COMPETITION IN İZMİR (FROM THE END OF THE XIXTH CC TOWARDS THE XXTH CC)*** Ali Güreş, ¹Günver Güneş, ²Şaheser Güreş* Adnan Menderes University, School of Physical Education and Sports¹ Adnan Menderes University, Faculty of Science and Literature, Department of History² Adnan Menderes University, School of Physical Education and Sports

In this research, we will have a journey to the historical adventure of athletics in İzmir which is one of the most splendid modern sports in the period of late 19th century and early 20th century. According to the sources, it is found out that the first interest to athletics started in 1890 when an athlete club was founded and we knew that 1892 first athletics competitions were held in a horse-race track in Buca because there wasn't an orderly athletics track. Since 1894, there were clubs named Apollon and Panions and their athletes were successful at the competitions which were held regularly. The reason why there was no Turkish in these competitions was that II. Abdülhamit put pressure on Turkish and Muslim people. So the winners were mostly from Levanten families. In those competitions, Armenians and Greek youngsters were successful but Jewish ones didn't participate in. The parts of the competitions were 100, 120, 220, 440 yards running, a half, one and eight and a half miles running, shot putting, discus throw, pole-vault and long jump. And in 1908 although Greeks and Armenians were very good at running techniques, Turks and Jews were already behind most of them.

P252**Management and Organization****FOOTBALL IN İZMİR (FROM THE END OF THE XIXTH CC TOWARDS THE XXTH CC)*** Günver Güneş, ¹Ali Güreş, ¹Şaheser Güreş* Adnan Menderes University, Faculty of Science and Literature, Department of History¹ Adnan Menderes University, School of Physical Education and Sports

The social-economic structure opening to the West in Otoman Empire showed itself also in sport activities in the second half of the nineteenth century. İzmir; like Selanik and İstanbul the capital, had a characteristic of doing European Sports. There was no concrete evidence about where the first football match was played in Otoman Empire. As far as we reached, we could see that football was played in İzmir and Selanik much earlier than in İstanbul in late 1870s. 130 years ago, some young members of a few English families in İzmir played football to have some fun and as a sport. The first football matches between the cities İzmir and İstanbul was first played by non-Muslim youngsters' teams. In the late 19th century and early 20th century, football in İzmir was better than football in İstanbul. The first football club in İzmir was "Terbiye-i Bedeniye" in Karşıyaka which was founded in 1912. Between the years 1912 and 1914 a team called "İzmir İdmanyurdu" was mentioned and we thought that it might have been the club Altay. In the years of I. World War, the most successful football team in İzmir was Altay which was founded in 1914. It was the second team after Karşıyaka which was registered officially. By the Independence, in different parts of İzmir a lot of football teams were founded. Except those there were also the clubs; Jewish Maccab İn Karataş, English Club, and some school football teams which were; Male Teachers' School, Art School, Sultani School (a kind of senior school), and Pilots' School.

P253**Health and Sports****INVESTIGATION OF CORRELATION BETWEEN PERSONS PHYSICAL HEALTH AND SPORTIVE ACTIVITY, RECREATION, NOURISHMENT AND SMOKING HABITS WHO WORK IN DIFFERENT JOBS*** Fatih Kılınc, *Yalçın Taşmektepligil, *Münevver Karabulut, *Sinan Akın* Dumlupınar University, School of Physical Education and Sports

Objective: In this research the effect of sportive activity, recreation, nourishment and smoking habits on persons physical health was investigated on people who work in different jobs.

Methods: The research has been done on totally 187 volunteer person; 139 of them were working in Ministry Of National Education, 21 of them were teacher and 27 of them were civil servant in Ministry Of National Education, while the average age, height and weight of the men (n: 112) were $36,3 \pm 8,6$; $173,8 \pm 5,9$ cm. and $76,2 \pm 10,3$ kg., for the women these features were $32,4 \pm 7,3$; $164,9 \pm 6,9$ cm. and $59,8 \pm 11,3$ kg. respectively. The data was obtained by questionnaire and the participants has been asked to answer following questions; identity information, sportive living style, health conditions, recreation and nourishment conditions. The statistics analysis of the results were carried out using SPSS 11.5 program.

Results: After the analyses of questionnaire, it was found that 42 % of the person (men and women) were feeling energetic, 55 % of them were not doing any physical exercises, 32,1 % of them were consider importance of healthiness, 54 % of them were not have any health problems, 57,2 % of them were not smoking, 43,3 % of them have spare time partially, 61 % of them weren't using well their spare time, 70 % of them weren't have balanced nourishment and 62,6 % of them were nourished regularly. It was determined that there was an important correlation between general health conditions and smoking habits ($P < 0,05$), whereas there wasn't any important correlation between health condition of person with recreation and balanced nourishment ($P > 0,05$).

Conclusion: although people who participated in this research haven't had any health problems but they weren't as fit as expected. In addition it could be said that there was some problems about recreation.

P254 Health and Sports

THE RESEARCH ON THE BODY TEMPERATURES OF THE CHILDREN ATTENDING THE BASKETBALL SUMMER SCHOOLS

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Objective: The main aim of the research is to show the distribution of the changes in the body temperatures of the children in a unit training period.

Methods: 26 male basketball players has attended to the research voluntarily training at the sports summer school in Kütahya. The attendants were average $11,7 \pm 0,8$ years old, $1,45 \pm 0,09$ m height and $38,1 \pm 7,7$ kg. weight.

GEON branded digatal thermometers were used in the research. The unit training period is organised by 1,5 hour. The body temperatures were measured pre-training, at the half time of the training (45 min.), after-training, 5 min. after training (95 min.) and 10 min. after training from the underarm. The data were analysed in the SPSS 11.0 statistics software.

Results; The average of body temperatures of the basketball players at the pre-training were measured as $36,11 \pm 0,5C^{\circ}$, at the half-time (45min.) as $36,17 \pm 1,1C^{\circ}$, just at the end of the training period (90 min.) as $35,82 \pm 1,1C^{\circ}$ five minutes after the end of training period (95min) as $35,76 \pm 0,9 C^{\circ}$ and 10 min. after the training period as $36,08 \pm 0,5C^{\circ}$.

Conclusion: Therefore, in a unit training period the body temperatures are settled around $36C^{\circ}$ by prespiration, after the training period it takes 10 min. to return the pre-training values.

P255 Behavioral Sciences

THE RELATIONSHIP BETWEEN GOAL ORIENTATION AND PERCEIVED MOTIVATIONAL CLIMATE AMONG HIGH SCHOOL VOLLEYBALL PLAYERS IN TURKEY

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The aim of study was to explore the relationships between goal orientation and perceived motivation climate among high school boys volleyball players. A total of 156 high school volleyball players ($X = 16.33 \pm 0.75$) participated in this study. The Task and Ego Orientation in Sport Questionnaire (TEOSQ) ve The Perceived Motivation Climate Questionnaire (PMCSQ) were used in the study. Descriptive statistics and pearson correlation coefficient were used as statistical analyses. Positive significant relationships were found between task orientation and mastery climate (0.236; $p < 0.003$) factors. In conclusion, When high school volleyball players task orientation rease mastery climate increases.

P256 Health and Sports

RESEARCH ON THE EFFECT OF THE POSTURE, MEASURES OF DEPTH AND DIAMETER OF THE CHEST OVER THE RESPIRATION PERFORMANCE FOR THE PUBERTY PERIOD BASKETBALL PLAYERS

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Objective; the effect of the posture, measures of depth and diameter of the chest over the respiration performance for the puberty period basketball players

Material and methods; 33 male volunteer basketball players attending the summer school of Young and Sports Association participated the research. Two groups are organised due to the average vital capacity values. The average values of the first group was, $11,7 \pm 0,8$ age, $1,45 \pm 0,1$ m. height and $39,2 \pm 8,7$ kg. weight, the second group was $10,8 \pm 1,2$ age, $1,42 \pm 0,1$ m. height and $32,5 \pm 5,7$ kg. wight. The posture analysis was determined from the anterior and lateral by the newly developed posture analysis programme. The depth and diameter of the chest was measured by the Holtain branded compass according to the anthropometric measurement protocol. To determine the respiration performance Cosmed branded manual spirometer was used. Also vital capacity (VC), forced vital capacity (FVC), one second forced vital capacity (FEV1) and the percentage of one second forced vital capacity (FEV1%) are determined by this method. The statistics are determined by the descriptive statistics and the correlation between the groups are determined by the t- test statistics.

Findings; In the anterior posture analysis the chest zone symmetric average difference was $0,67 \pm 0,6$ degrees for the first group, $3,89 \pm 1,6$ degrees for the second group. In the lateral analysis dorsal angle was determined as $147,2 \pm 7,7$ degrees for the first group and $147,7 \pm 7,1$ degrees for the second one.

In the anthropometric measures, chest diameter average was determined as $23,7 \pm 1,8$ cm. for the first group, $21,5 \pm 2,1$ cm. for the

second group and the chest depth average was determined as $17,0 \pm 1,4$ cm. for the first group and $15,6 \pm 1,5$ cm. for the second group.

For the respiration parameters the Vital Capacity (VC) was determined as $2,65 \pm 0,2$ lt. for the first group, $2,10 \pm 0,2$ lt. for the second group, Forced Vital Capacity (FVC) was determined as $2,52 \pm 0,3$ lt. for the first group and $2,15 \pm 0,3$ lt. for the second group, one second Forced Vital Capacity (FEV1) was determined as $2,45 \pm 0,3$ lt for the first group and $2,06 \pm 0,3$ lt. and for the second group, the percentage of one second Forced Vital Capacity (FEV1%) was determined as $97,0 \pm 2,6$ for the first group and $95,3 \pm 4,7$ for the second group.

Results; Between the group that have a higher vital capacity average and lower vital capacity significant differences ($P < 0,05$) was determined according to the chest symmetry, chest diameter and vital capacity. However there was no significant difference ($P > 0,05$) between the values of dorsal angle, chest depth, FVC, FEV1, FEV1%.

P257

Behavioral Sciences

THE RELATIONSHIP BETWEEN PLAYING TIME WITH GOAL PERSPECTIVE THEORY, LIFE SATISFACTION AND PERCEIVED MOTIVATIONAL CLIMATE AMONG YOUNG BOY BASKETBALL PLAYERS IN TURKEY

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The aim of study was to the relationship between playing time with goal perspective theory, life satisfaction and perceived motivational climate among young boy basketball players in Turkey. A total of 187 basketball players participated in this study. "Task and Ego Orientation in Sport Questionnaire", "Perceived Motivational Climate in Sport Questionnaire" and "Life Satisfaction Questionnaire" were used in the study. Descriptive statistics and pearson correlation coefficient were used as statistical analyses. Pozitive relationship was found between playing time and life satisfaction (0.460 ; $p < 0.00$). Negative relationship was found between playing time and mastery climate (-0.210 ; $p < 0.01$) of young boy basketballer. The relationship could not be found between playing time with task orientation, ego orientation and performance climate.

P258

Physical Education

COMPARISON OF CHILDREN AND YOUNGS' (12-14 AGE) EXPECTATIONS IN RURAL AND URBAN AREAS TOWARDS TO PHYSICAL EDUCATION AND SPORT PRACTICE

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Purpose: It aims to search of structure of physical education and expectations of students from this lesson who are in primary schools being in city centres and out of city centres. Physical Education lessons start with Physical Education teacher by 6th. class. That is why 6, 7 and 8th classes are included in this study.

Methodology: Search is a descriptive study. In pre-practice, the data from 159 people are evaluated by experts and on the last practice, it is reached to 414 people. Physical Education Expec-

tation Questionary includes 54 expressions which is used for obtaining data. a) Students informations b) What is physical education c) The needs of equipments d) Psychomotor needs e) Sentimental and social needs f) Mental needs g) Quality. For statistical analysises, frekans, percenty, independent samples T test and chi-square are used. Reliability coefficient: pre-practice ($0,9761$), last practice ($0,9522$).

Results: The students in study: girls %58,5, boys %41,5. In city centre: %29,5 (%54,1 girls, %45,9 boys). In rural areas: %70,5 (%60,3 girls, %39,7 boys). There is no noticable difference between students sexuality living in rural areas and city centres. (Fischers Exact Test $p:0,146$ $p > 0,05$). There is no difference between age and height according to their sexualities. Boys are weightier than girls ($p > 0,05$). In city centre: Age $12,79 \pm 1,04$, height $151,82 \pm 9,29$ cm, weight $39,50 \pm 7,20$ kg; In rural areas: Age $13,17 \pm 1,28$, height $155,27 \pm 10,37$ cm, weight $44,07 \pm 9,07$ kg. According to this analysis, there is noticable difference between students living in city centre and rural areas ($p < 0,05$).

Conclusion: Physical Education schedules are needed to be developed by contemporary needs.

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Movements and Training

A COMPARISON OF HAND GRIP STRENGTH OF AMATEUR MALE WRESTLERS AND SEDENTARY UNIVERSITY STUDENTS

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The purpose of this study was to compare the hand grip and pinch strength of male wrestlers with that of university students.

Twenty-three volunteer university students (mean age 22.00 ± 1.69 years and mean body mass index 22.31 ± 2.53) and twenty-two amateur wrestlers (mean age 20.27 ± 2.49 years and mean body mass index 23.88 ± 1.93) were tested for grip and pinch strength. Mid-arm and wrist circumference were measured with a flexible plastic tape. Grip strength was assessed with an Jamar dynamometer. Pinch strength was measured with a pinch gauge. Body composition was measured by Tanita body composition analyzer. The Mann Whitney U test was used to determine the differences within groups and a P value < 0.05 was taken as being statistically significant. Correlation analyses of the maximal grip and hand size values were determined by bivariate Pearson correlation analysis.

Although mid-arm and wrist circumference of wrestlers were statistically higher than those of university students, there was no statistically significant difference in grip strength between two groups. Left hand tip and palmar pinch strength of wrestlers were statistically higher than the control group.

As a conclusion, wrestling is effective in building up the mid-arm and wrist circumference but it has no effect on hand grip and pinch strength.

P260**Adapted PE****THE ANALYSIS OF IMPROVEMENTS OF MACRO PERIOD FLEXIBILITY TRAINING ON THE 10-14 AGE GROUP EDUCATABLE MENTALLY HANDICAPPED CHILDREN**

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10-14 age group 24 teachable mentally obstructed students has taken place in this study. Among this 24 students 12 control 12 test group have been formed. However the test group has taken 8 weeks training program the control group hasn't taken any programs. For the physical and elasticity parameters of the test groups before and after training however we found meaningful differences in their height, weight, their bodies back extension, front flexibility, spagat, bridge, sit-lie down test ($p > 0,05$). We couldn't find any meaningful differences in the values of shoulder flexion test. ($p < 0,05$) in the control group however there are meaningful differences in the height and weight values ($p > 0,05$) there aren't any meaningful differences in the other parameters ($p > 0,05$). As a result, there is a positive improvement in teachable mentally obstructed children between 10-14 y. After 8 weeks, three days in a week and 2 hours in a day elasticity training.

We think that for such kind of individuals to take a position in the social life these exercises have positive effects on them. In these schools in physical education lessons if the lessons are committed suitably for the convenient methods, there will be a positive improvement in the physical and behavioural characteristics of the mentally obstructed children.

P261**Adapted PE****THE VISUAL REACTION TIME COMPARISONS OF AUDIALLY HANDICAPPED CHILDREN**

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This study has been made on 11-14 years old deaf children. For the study, randomly 30 test and control group have been chosen. However the test group has taken a quickness (speed) training program for 8 weeks and 3 days in a week, the control group hasn't taken any training program.

Before and after training, the visual reaction time of the groups have been measured by New-Test 1000 instrument (tool) after the test group's left hand visual reaction time measurements 't' value has improved 2.56 and in right hand visual reaction time 't' value has improved 2.89. This improvement is meaningful in $p < 0.05$ level but on the other hand we couldn't find any improvement in the control group's left and right hand visual reaction time $p > 0.05$.

P262**Movements and Training****INDIRECT RESEARCH OF WEIGHT OF ONE REPETITION MAXIMUM IN BENCH PRESS TECHNIQUE**

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The objective of this research is to find the weight of 1 Repetition Maximum (1RM) in reality by using the method of 3, 6 and 10 Repetition Maximums. For this reason, the group of 45 men subjects engaged in sport actively whose ages between (ort= 18 ± 0.6396), height (ort= 174.37 ± 4.44), weight (ort= 62.91 ± 6.77) and somatotype values ($1.43 \pm 0.14 / 4.7 \pm 1.33 / 3.5 \pm 0.90$) were constituted. The regression formulas for prediction of 1 Repetition Maximum was improved in bench press by using the method of 1, 3, 6 and 10 Repetition Maximums. Besides, it was not found statistical difference ($p > 0.01$) between 1 Repetition Maximum found by regression formulas (Conjectural 1 Repetition Maximum) and 1 Repetition Maximum found in reality. More, the proportion of the weight of 3, 6 and 10 Repetition Maximums to 1 Repetition Maximum was calculated (3TM %91.95, 6TM %83.37, 10TM %71.46). As a result, the regression formula whose standard fault ($sh = \pm 1.120$) is minimum was found the formula of getting with the method of 3 Repetition Maximum (3RM). $Y = 1.619 + (1.062 * 3 RM)$

P263**Movements and Training****THE EFFECT OF 8 WEEKS INTENSIVE STRENGTH TRAINING SOME PHYSIOLOGICAL AND PHYSICAL PARAMETERS 14-16 AGE MALE**

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Subjects physiological parameters were measured by using standardized field and laboratory tests. Subjects within strength trained training three times a week for eight weeks. Control groups had no exercise regimes:

Purpose: The purpose of this study was to determine of 8 weeks strength training program on some physical and physiological parameters (Body fat, MaxVO₂, D_{ua}, Vertical Jump, VC, FVC, MVV, IVC) of school boys aged 14-16 years. a total of 37 healthy school-boys were voluntarily participated into this study. Subjects were randomly categorized into three groups as İZOT (n= 12), İZOM (n= 13) training, Cont (n=12) groups.

Method: Subjects physiological parameters were measured by using standardized field and laboratory tests. Subjects within strength trained training three times a week for eight weeks. Control groups had no exercise regimes: Subjects were selected by questionere with this aim 37 healthy subjects voluntarily participated to the 8 weeks intensive strength training program. The group (n=12) which had trained before (İZOT) $14,98 \pm 0,80$ has mean age. The group (n=13) which had trained before (İZOM) $15,35 \pm 0,45$ has mean age. The other group which previously undertaken training (KONT) $15,03 \pm 0,72$ has mean age. Both group performed intensive strength training 3 days a week during 8 weeks Strength training program to determine % body fat, Aerobic capacity, vertical jump, Standing long jump and spirometer to analyze respiratory parameters of subjects were recorded before and after 8 weeks isotonic and isometric strength training program. Statistical analyses were done by using paired t test and ANOVA. The end of strength training, experiment groups were significantly increased ($P < 0,05$)

Results: Statistically significant differences was found for the ($P<0.05$) before and after 8 weeks values in both group İZOM groups % body fat, Aerobic capacity, vertical jump, Standing long jump and FVC significantly increased after training ($p<0.05$) In KONT group no significant differences were found.

Conclusion: As a result % body fat, Aerobic capacity, vertical jump, Standing long jump and FVC İZOM group were higher than the other group.

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THE EFFECTS OF 8 WEEKS PLYOMETRIC TRAININGS SOME PHYSICAL AND MOTORIC PARAMETERS IN INDIVIDUALS

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The purpose of this study is to determine the effects 8 weeks explosive power and plyometric training program on some physical and physiological parameters of 15-16 years young male sports. 25 sports who are currently participated this research. 13 of the sports as a plyometric trained training group. 12 of the sports as a control group Experimental group had explosive power and plyometric training as well as technical training three days a week during the 8 week period. Control group had no training regimes. The physiological and physical parameters of the subjects were tested with scientifically accepted laboratory and area tests.. In order to find out whether the differences between the averages are meaningful; dependent and independent groups were tested with the t-test variation analysis.

At the end of the 8 week training program, the meaningful changes were obtained from explosive power group in vertical jump, standing long jump, 15 seconds multiple jump, handgrip, body fat percentage ($p>0.05$).



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