



# for Physical Education Pedagogy:

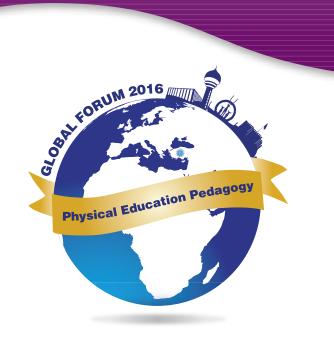
"Technology, Networking and Best Practice in Physical Education and Health: Local to Global"

# 26-28 MAY 2016 ANKARA, TURKEY

# ABSTRACTS

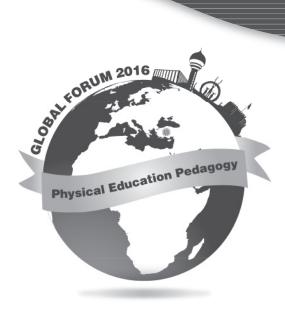
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# Editor: Gıyasettin Demirhan ISBN: 978-605-83126-0-9





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GLOBAL FORUM 2016 for Physical Education Pedagogy

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### PREFACE

#### Dear Colleagues,

It it gives us pleasure to meet you in 4<sup>th</sup> Global Forum for Physical Education Pedagogy (GOFPEP 2016), in Ankara, Turkey on May 26-28, 2016.

"Technology, Networking and Best Practice" has been chosen as the theme of GoFPEP 2016 which will allow a comprehensive discussion on the future direction of health and physical education inspired by the various expertises of international educators, teachers, health professionals, business leaders, government officials, researchers, administrators, exercise scientists, policy makers and students.

All committees have been working hard to prepare this global event. 66 invited delegates and 17 future leaders prepared a 15 min PPT web cam presentation which provides an illustrative example of research entwined school and community best practices highlighting technology and community networking. 15 minute PPT web cam presentation will be shared by other researchers and practioners all over the world and will be introduced in official web site of GOFPEP 2016. By this way more people get a chance to reach information about the best practice, networking and new technological development and its contribution to child development.

As distingusihed delegates and future leaders, you have knowledge, experience, and vision that help us to pave our way into future. You are our greatest supporter and asset today and tomorrow. We could not accomplish what we do without your support. We ask you stay engaged, keep us proactive and help us to shape the future of physical education and sport pedagogy.

We expect that GOFPEP 2016 will leave a very happy memory in all the participants' life and wish that new friendship connections will start and new personal contacts and professional projects will be established. We believe that new cultural experiences will help all of us to have a better understanding of the world and look forward to meeting distinguished delagets and future leaders coming from different countires.

Best wishes,

**Prof. Dr. F. Hülya AŞÇI** Chairperson, Scientific Committee, GoFPEP 2016

Prof. Dr. Ming-Kai-CHIN Chairman, Organizing Committee, GoFPEP 2016

Prof. Dr. Gıyasettin DEMİRHAN President, GoFPEP 2016



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Assoc. Prof. Dr. Maria ABULKHANOVA Russia

**Prof. Dr. Eid KANAN** Jordan



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### **KEYNOTE**

### Prof. Dr. Stephen KOPECKY

American Society for Preventive Cardiology (ASPC) Mayo Clinic, USA

### Improving lifestyle: The key to preventing chronic disease

The practice of medicine has historically been focused on treating disease after it occurs. In the early 21st century, the leading cause of death worldwide switched from communicable diseases (eg, infections) to non-communicable diseases (eg, heart attack). The current leading cause of death worldwide, cardiovascular disease is primarily due to inappropriate lifestyle. Healthy lifestyle centers on six key habits: 1) regular, vigorous, physical activity, 2) proper nutrition (eating at least five servings of fruits and/or vegetables a day), 3) no tobacco use or exposure, 4) low incidence of hazardous and harmful drinking/alcohol use, 5) engaging in the practice of positive thinking, and 6) appropriate sleep hygiene. The role of the individual physician, while key to treatment of disease that has already occurred, is less prominent in the promotion of healthy lifestyles and habits. There is a growing recognition and understanding of the role that community networks, physical and social environments, and public policy all play in fostering healthy lifestyle behaviors. Multi-faceted interventions to improve lifestyle generally have greater evidence of impact and should have input from healthcare systems and include education, policy, and environmental changes. The key components that will lead to change in lifestyle habits will depend upon: 1) family and social networks 2) educators and schools 3) employers and worksites 4) physical and social environment 5) faith based organizations 6) community support 7) health plans and payers and 8) public policy. The presentation will include the types of benefits that can be achieved with an integrated approach including examples from best practices around the world.



### **INVITED SPEAKERS**

### Prof. Dr. Marc CLOES

Department of Sport and Rehabilitation Sciences University of Liege, Belgium

### Brain breaks in the classroom: Examples of implementation in Belgium

School is identified as the main pillar of the fight against sedentariness in youth. Several models of active schools have been described in the literature and, under the umbrella of the school policy enhancing physical activity (PA), five main dimensions can be identified (Physical education, Active transportation, Life environment, Sport at school, PA in the classroom). This underlines that, if the PE teacher is considered as the corner stone of the PA promotion at school, (s) he is not alone to create the conditions aiming to permit to the children to reach the PA level recommended daily. Integrating more PA in the classroom seems to be a promising approach for children lifestyle as well as for their overall learning. Worldwide, initiatives are proposed in order to convince classroom teachers to integrate more often PA in their educational activities. Nowadays, it seems determining to share experiences in order to identify good practices and solutions to the current problems that teachers can encountered on the field. The goal of this presentation is to illustrate two concrete examples of projects implemented in primary schools in Wallonia, Belgium. We will describe the teaching context as well as the main findings provided by a systematic data analysis conducted during these experiments. The first study focused on three classes proposing Brain Breaks (BB) videos during a 10 weeks' period. The attitude of the pupils and the teaching staff opinions were analyzed. In the second study, varied PA breaks (BB video, games, and video developed by the pupils) were proposed during periods of two to four weeks. Data from participant observation and questionnaires were used. In both studies, findings support the planning of PA during classroom. Even if more controlled research designs would be necessary in order to determine the evidence of the results, we can state that practitioners and children involved in the projects showed really positive reactions about these opportunities to be more active.

### Prof. Dr. Mustafa Levent İNCE

Department of Physical Education and Sport Faculty of Education, Middle East Technical University, Turkey

### Reforming school physical education for lifetime physical activity: What we learned in Turkish setting

Turkish School Physical Education policies have recently reformed toward prioritizing the lifetime physical activity participation of learners. New policies included a change in the name of physical education classes in primary and secondary schools, increase in physical education related class time in primary and secondary grades and a new curricula prioritizing the overall wellness and lifetime physical activity participation of learners. Success and failure of the policies depends on the readiness of the stakeholders, social setting and physical setting for such a change. The purpose of this presentation is to 1) discuss the readiness of school physical education stakeholders (e.g. individuals including learners, teachers, administrators, parents; institutions including Ministry of Education, Health, Youth & Sport, other Local Governmental and Nongovernmental Organizations), social and physical setting for the above mentioned policy change in Turkey, 2) present the small scale research findings on the effective strategies to prepare the stakeholders, and lifetime physical activity related social and physical setting of Turkey, 3) make evidence based recommendations for local and global audiences on lifetime physical activity knowledge, skills and behavior interventions using school physical education classes.



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# **WORKSHOP PRESENTERS**

### **Dr. Dario NOVAK**

Faculty of Kinesiology University of Zagreb, Crotia

### Physical education and best practice: A review of research

GoFPEP 2014 was focused on the theme of "Physical Education and Health: Global Perspectives and Best Practise". The program included over 80 delegates from nearly 50 countries. Delegates agreed that the best practise always should be supported by a process of objective research and validates its success at the highest degree of proven effectiveness. This workshop will present research-validated best practise in physical education that are examined through a systematic review of databases for the years 2004-2013. This presentation is focusing on physical education or physical activity and core academic subjects for school aged youth. This review will provide a clear picture of the increasing reliance on integration and physical education. Accordingly, the influences of integration of physical education into the classroom in the form of physical activity (Brain Breaks), and integration of core academic subjects into the physical education setting will be presented. Classroom teachers are increasingly being encouraged to incorporate core academic subjects with physical activity into their classes, and it would to appropriate for physical educators to understand the desired outcomes of integration of common core academic subjects, before attempting its implementation.

### Dr. Fatma SAÇLI UZUNÖZ

Department of Physical Education and Sport Pedagogy Nevsehir Haci Bektas Veli University, Turkey

# Promoting physical activity within a technology supported program: A collaborative research in Cappadocia, Turkey

Nowadays, there is an important need to find new ways to promote physical activity and encourage behaviour change to increase participation in physical activity. Although playing computer games causes a sedentary life, technology has been used to promote physical activity for children of the age of technology. Especially, interactive video games or internet-based physical activity interventions can be used to ensure active life style. In the framework of collaborative action research, the aim of this presentation is to illustrate promotion of physical activity within a technology supported program in Cappadocia region of Turkey. Our motto is: "Active schools... Healthy Kids... with Brain-Breaks exercises". The main goal is to make children more active and better learners by using Online-Streaming (OLS) Brain Breaks (BB) videos in classroom since September 2014. The first round of the project started with two schools, and 300 students from third to fifth grade who involved in using BB videos three to five minutes in every school day for four months in their classrooms. The Questionnaire on Physical Activity (QPA) was used to measure the effects of the intervention within the pretest-posttest experimental design with comparison group. By interviewing with teachers, principals and students the first perceptions about the effect of intervention were positive regarding students' attitudes towards and motivation for physical activity, physical self-confidence as well as the acquisition of health-related and specific academic knowledge. Especially, teachers and principals mentioned that there was an increase in school attendance and positive behavior by these interventions because of multi-dimensional learning opportunities with entertaining education videos. Positive results obtained from the first round encouraged us to expand the study throughout the Cappadocia region with participation of 150 schools. A brief result of the second round of the project will be presented. Simultaneously, almost 20 new BB videos were created by university students to promote health and wellness of children and community. In this city project, I would like to highlight the importance of collaboration with principals, teachers, university, students, parents, and government. Because without any help and support of each stakeholders, it is not possible to initiate and maintain children's participation in regular physical activity. Collaboration with all stakeholders was the key in ensuring a feasible intervention to promote physical activity in children all over the world.



### **WORKSHOP PRESENTERS**

### **Dr. Garry KUAN**

Sports Science Unit and Orthopedic Department School of Medical Sciences University of Sains Malaysia

# The Power of Music: A Holistic and Innovative Method in Integrating Music into Physical Education

Researchers have suggested that music can be carefully selected to match the requirements of activities and characteristics of both individuals and groups, in order to produce significant impacts on performance enhancement and motivation in physical education. In addition, music has been shown to have psychophysical effects of lowered perceived effort and arousal control, and improved affective states and synchronization effects. There is increasing evidence to suggest that the "right" music, can lead to greater frequency, intensity, and duration of exercise behavior, which could then lead to enhance exercise motivation. This workshop will present research using validated holistic and innovative method in integrating music into physical education, promoting community engagements, and to use music as a therapy for enhancing the self-esteem of autistic, cerebral palsy, and mental disabilities children. I will report on the use of synchronous and asynchronous music in enhancing exercise, movement, and fun. Then, I consider issues related to understanding of how music works, the selection of music and practical application of integrating music for the enhancement of aerobic and anaerobic activities will be discussed. I will then address the cultural perspectives of choosing the "right" music in different culture perspectives. Finally, I will conclude by noting how, in all of this research, have contributed to new knowledge to enhance the understanding of the ubiquitous of using music in physical education.

### Prof. Dr. Luz Amelia HOYOS

Secretary, Association Latinoamerican of Social-Cultural Studies of Sport (ALESDE) Faculty of Physical Education Universidad Pedagogica Nacional, Colombia

# Program for Academic Excellence and Integral Education Across Educational Sport in Bogotá, Colombia

In the city of Bogotá, the Secretary of Education, proposed in 2013 the "Program for Academic Excellence and Integral education, 40x40". This program aims to extend the time spent by students in their school day, providing an 8-hour school day. Thus, it is intended to reduce the risk of dropout scholar, across quality learning on four pillars: Health, Learning citizens, Educational Quality and Performance, for this purpose 22 Interest centers are created: in individual sports and team sports. Alternative bodily practices are also included as: Parkour, skateboarding, Break dance, biodanza, yoga, folk dance, capoeira, recreation in nature, traditional games and circus activities, which are constituted as a novelty for school children and youth. The program involves the active participation of students, teachers, schools and family, to impact favorably on the health of students while people develop values such as: respect, tolerance, solidarity, commitment, sacrifice, responsibility, courage, self-improvement, perseverance and teamwork.



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### **MODEL PROGRAM PRESENTERS**

Since its inception in 2013 until today the program has served more than 140,000 students in different centers of interest. Of which 42,000 children from 60 public schools are linked to the sports program, which includes two class sessions per week with a duration of 120 minutes, in addition, the program organizes festivals and competitions focused on improving social skills of children and young people and provide an opportunity to link with performance sports students who have a sports talent.

The highlights of the program 40X40 that refer to the possibility that has been given to students to access alternative sports practices will be presented, which until recent years were practiced only informally in the street, but now from its inclusion in the school curriculum can be practiced with the support of coaches and in appropriate facilities. On the other hand, the 40X40 program allows the participation of children and youth with disability that previously had no access to sports practices carried out in conjunction with non-disabled children.

Thomas ROOT HOPSports, Inc. USA

### Dr. Yeşim BULCA

Department of Physical Education and Sport Teacher Education Faculty of Sport Sciences, Hacettepe University, Turkey

### A Best Practices Model School in Ankara by Using Technology

Physical activity is important for children and youth future health. However recent research shows that inactive life has negative effects on well-being of school age children. Changes of life, diets in high fat and sugar have resulted in obesity which has become the widespread metabolic diseases in the world. School-based physical education is suggested as a means for increasing physical activity. In addition, physical education can provide children with a major proportion of the physical activity proposed for health purposes. Turkish Ministry of National Education adapted outcome physical education program with an emphasis on lifelong health related physical activity based on recommendations by National Association for Sport and Physical Education. All these findings, we tried to establish model schools on active and healthy lifestyle practices. We planed that the physical education classes were designed to promote high levels of physical activity teaches movement skills a PE class was once a week. We used technological device which were pedometer, heart rate monitor in PE class. A lesson lasted 80 minutes and had two parts: health related activities and skill related activities. Health related activity units included aerobic games, walking, jogging, and jumping ropes. Although the main focus was on developing cardiovascular endurance, brief activities to develop abdominal and upper body strength were included. Skill related activities included soccer, basketball, volleyball and badminton. At the same time, these sports and games had the potential cardiovascular fitness. In addition, the web assisted program taught behavior change health related skills to help children generalize understand physical activity concepts by using Edmodo Web 2.00. We followed the development of the students through a variety of measures for a year. As a result, we can say that the application made a positive impact on both the primary and middle school students.



### **INVITED DELEGATES**

#### Assoc. Prof. Dr. Maria ABULKHANOVA

Department of Physical Education and Sport Science Moscow State Academy of Physical Education, Russia

### Internet technologies in the physical education process with the special medical group students

The research is devoted to innovative technologies, which can be used in the physical education process with students of special medical group. The students with different chronic conditions and diseases, which affect physical activity level. The conditions must be taken in to account during the physical education process. Physical education teacher by using whole range of innovative methods during the classes and outside of them can motivate students to achieve the best results in the subject and raise the level of student's health. The research also presents data obtained from medical examinations, where the disease is detected by type. The studies allowed us to conclude that the use of internet technologies to build better and more efficient communication between teachers and students allow us to drive the engagement of the pupils in the physical education classes, increase the effectiveness of them and as a result improve wellbeing of the young people. Moreover, after the experiment the experimental group can perform the long jump, push-ups, sit-ups and the adapted cooper test incomparably better than the control one.

Keywords: physical education, special medical group, new education technologies

**Prof. Dr. Iradge AHRABI-FARD** School of HPELS University of Northern Iowa, USA

# School's physical education program as a empowering influence to commit to a physically active lifestyle

The objectives of physical education at schools have been academically sound. But in application phase, there are variety of outcomes that most of them have not contributed to the development of a health conscious and physically active population in the USA. This document is a challenged to achievable objectives and the application of famous Benjamin Bloom's three taxonomy domains from 1956. The objectives is designed to improve growth and create personal physical activity of choice that can promote participation beyond the school year. The emphasis of three domains has been: affective for elementary, psychomotor for middle school and addition of two other domains in high school as literacy domain and leadership domain. The last two recommended domains are supposed to prepare students with information about the effectiveness, benefits and harms of different activities based on personal condition and scientific recommendations and empower the student to self-lead frequent participation in physical activities of choice.

Keywords: three taxonomy domains, literacy domain, benefits and harms of physical activities



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# **INVITED DELEGATES**

### Prof. Dr. Nadhim AL-WATTAR

College of Physical Education & Sport Sciences University of Mosul, Iraq

# The role of physical education using positive psychology intervention in status of end-less war & worries: Experience from Iraqi schools

Iraq represents a model of the challenging mental health needs of children and young adults. They live in: conflictaffected zone, low-income, long-term instability and daily violation. Recent study reveals that 44% of Iraqi secondary school students suffered from serious symptoms of social phobia. The negative thoughts "to survive" narrowed Iraqi students' mindset to either be civil warriors or flee from the country as homeless refugees. This work is based on the broaden-and-build theory developed by Barbara L. Fredrickson who describes the function of positive emotions in broaden mindset of youths and build their personal resources (physical, intellectual, and social resources). It helps them cope well with life and grow successfully through diversity and difficulties. The technique aims to booster happiness and positive thoughts of youth. The programs consisted of playing for "more than wine" and using "simple positive activity intervention". Results were observed qualitatively by assessing seven dimensions of psychological well-being represent the hedonic and eudomenic perspectives of happiness (Self-acceptance, Positive relations with others, Autonomy, Environmental mastery, Purpose in life, Personal growth, and satisfaction).

Keywords: positive sport psychology, physical education, Iraqi schools

### Prof. Dr. Carla ANAUATE

Department of Psychology Universidade Nove de Julho, Brazil

# Best neuropsychological practice for the promotion of health through motor exercises, cognitive training and affective relation

The neuropsychological abilitation is a mean to develop motor, cognitive and affective skills. This work is based on the social historical theory founded by Luria, Vygostky and Leontiev, who established that psychology would provide means to acknowledge how a natural process conected to a cultural process can produce the superior mental functions. Glozman, Luria's student, affirms that their is an essential need to do a motor, cognitive, respiratory and affective abilitation. All these spheres work together and should be always present in the neuropsychological abilitation sessions, because one helps the other to develop. This technique consists in compensating the deficient development of superior mental functions, such as: memory, attention, language, psychomotricity, executive functions, etc, by using the strong components to strengthen the weak ones. The main objective is to create new functional systems allowing the child to have a future autonomous learning of skills. Body movements, space dislocations, including rolling in space produce interhemispherical brain interactions which promote neurodevelopment. Results are observed qualitatively focusing that each person is an individual self and that relationships are essential to produce development. Interactions between the brain and the formation of mental functions require the maturity of the nervous system as well as an active remediative procedure which emphasizes relations of two or more human beings. Through the use of qualitative data this study has the intention to show that neuropsychological abilitation including: motor, cognitive and affective interaction promotes significant and effective neurodevelopmental health. It proves that the most important is not WHAT TO DO but HOW TO DO. Therefore RELATION is a key word. Consider every person as a unique individual providing development to occur.

Keywords: neuropsychology, development, relation, children



### **INVITED DELEGATES**

#### Prof. Dr. Branislav ANTALA

Faculty of Physical Education and Sports Comenius University, Bratislava, Slovakia

#### Lifelong education of primary schools' teachers in physical education and new technologies

The national educational project "Enhancement of Qualification of PE Teachers "started in Slovakia on February 1st, 2013 and finished on 30<sup>th</sup> of November 2015. The project was co-funded by the European Union in the framework "Education ". The aim was to enhance the quality of PE at schools and develop teacher's skills with using of new technologies in PE by means of life-long education of teachers. General teachers teaching PE at primary schools were the target group. About 3.400 teachers participated in this education program in 3 years. University lecturers and specifically trained secondary PE teachers with records of high quality provided this education. Each participant attended 110 hours of education, of which 60% was practical lessons and 40% theory. In courses teachers were become familiar with new content, methods, and forms of education of basic physical activities, traditional and non-traditional movement and sport activities, use of internet and novel means and technologies in PE and diagnostic in PE. Each participant was given a set of 14 educational didactic materials. 4 textbooks were published; the new electronic portal was designed. The portal also provided an opportunity for mutual exchange of experience and knowledge. Methodological videos and examples of good practices were available for them. This presentation is supported by a VEGA 1/0429/16 grant "New Technologies in Physical and Sport Education and Their Effects on an Affective and a Cognitive Development of Secondary School Pupil ".

Keywords: new technologies, physical education, lifelong education, PE teachers

### Prof. Dr. Hülya AŞÇI

Associate Editor, Psychology of Sport and Exercise (PSE) Head of Department, Physical Education and Sports Teaching Marmara University, Turkey

# Are the perceived teacher feedback and motivational climate predictors of enjoyment and motivation in physical education lesson?

#### Authors: F. H. Aşçı\* & G.Erturan İlker\*\*

\*School of Physical Education and Sports, Marmara University, İstanbul, Turkey \*\*Faculty of Sport Sciences, Pamukkale University, Denizli, Turkey

The purpose of this study was to investigate the role of perceived motivational climate and teacher feedback in enjoyment and motivation in physical education lessons (PE). One hundred-thirty-seven girls ( $M_{agg}$  = 13.47, SD = 0.54) and 167 boys ( $M_{agg}$  = 13.43, SD = 0.52) voluntarily participated in this study. Participants completed "Trichotomous Motivational Climate Questionnaire", "The Perception of the Teacher's Feedback Questionnaire", "Enjoyment Scale" and "Situational Motivation Scale for Physical Education Class". Hierarchical multiple regression analysis results at step 1 revealed that, sex contributed significantly to the regression model and accounted the variation in enjoyment (2%) and intrinsic motivation. The perceived motivational climate explained an additional 12% of enjoyment and 11% of intrinsic motivation. The perceived teachers' feedback was significantly contributed to extrinsic motivation (4%) and it was positively associated with perceived negative nonverbal feedback and perceived positive general feedback The perceived motivational climate and teacher feedback were significant contributor of amotivation and explained9 % of variance. The perceived mastery climate was positively associated with enjoyment. The perceived positive nonverbal feedback and knowledge of performance were positively related with amotivation. The perceived positive nonverbal feedback was also associated with intrinsic motivation but megatively related with enjoyment. The perceived positive nonverbal feedback was also associated with intrinsic motivation positive of knowledge was negatively related with amotivation. In conclusion, learning environment focusing on skill development, personal improvement and team atmosphere with positive nonverbal feedback lead to experience enjoyment, intrinsic and more autonomous motivation in PE for middle school students.

Keywords: enjoyment, motivational climate, teachers' feedback, motivation



for Physical Education Pedagogy

# **INVITED DELEGATES**

### Assoc. Prof. Govindasamy BALASEKARAN

Head, Physical Education and Sports Science (PESS) National Institute of Education (NIE), Nanyang Technological University, Singapore

### Self-Regulation of Exercise Intensity for Children in Physical Education in Singapore

### Authors: G. Balasekaran, D. Thor & K.W. Phua

Physical Education & Sports Science National Institute of Education, Nanyang Technological University, Singapore

Strategies used in physical education (PE) lessons are important to help students improve in their fitness. In general, there are two main different strategies in PE lessons – the games-concept approach (GCA) and skills-based approach (SKA). The purpose of this study is to compare the effectiveness of the GCA and SKA in PE lessons in improving children's cardiovascular fitness and investigate if children are able to self-regulate exercise intensity during PE lessons. Twenty-four male participants were randomly assigned into either the GCA (EG) (n=12, age 9.8  $\pm$  0.4 years) or SKA (CG) (n=12, age 10.1  $\pm$  0.3 years) PE class. Both groups underwent an intervention: a 6-week prescribed PE programme based on the approach in PE they were assigned to. Rate of perceived exertion (RPE) and heart rate (HR) were recorded for each stage (warm-up, games-time, cool down) of every PE lesson. A 1.6km run-test was taken pre- and post-intervention as a means to assess the cardiovascular fitness of the participants. Pre-post-intervention 1.6km run test results showed significant difference in both EG and CG, p<0.01. GCA in PE lessons with RPE as a tool shows better adherence for children. They are able to exercise at safe intensities as their RPE is more consistent. Children can enjoy PE lessons and this prevents injuries at the same time.

**Keywords:** rating of perceived exertion, children, self-regulation, physical education, games-concept, skills-based approach

#### Dr. Yeşim BULCA

Faculty of Sport Sciences, Department of Physical Education and Sport Teacher, Hacettepe University, Turkey

#### Assessent of 7<sup>th</sup> grade students's physical activity by using pedometers

#### Authors: Y. Bulca, E. Bilgin, F. Altay, & G. Demirhan

Faculty of Sport Sciences, Physical Education and Sport Teacher Department, Hacettepe University, Ankara, Turkey

The purpose of this study was to assess 7<sup>th</sup> grade students' physical activity level by using a pedometer. Data were collected from 58 teenagers who voluntarily provided data which were collected three different times a) in a week long b) just for the weekend c) the day that student' attend physical education class for a week recording period. The participants demographic profiles were as follows: 7<sup>th</sup> grade students (30 boys, M age 12,48 years; SD= 0.5, BMI= 19,38 kg/m<sup>2</sup>; SD=3,62; 37 girls M age 12,59 years, SD=0,4; BMI=21,15 kg/m<sup>2</sup>; SD= 3,57) from one middle school located in Ankara. Separate 2x3 repeated measures analyses of variance were used to examine differences in total steps/ day between sex and activity groups which were a week long, a weekend and physical education week day. The total sample took 8,735 steps/day, SD=773, 73; boys 9154 steps/day SD=631, 51 versus girls 8339,9 steps/day; SD=687,64. Steps/day computed for all days, weekends and physical education class day. there were a significant differences between steps/day [F<sub>(1-70)</sub>= 8,868 p<0.05] and gender [F<sub>(1-70)</sub>= 26,252 p<0.05] all days, weekends and PE class day across day for either group while no differences interaction effects [F<sub>(1-70)</sub>= 17004 p<0.05]. In conclusion, mean steps/day for young adolescent are not similar to the 10.000-14.000 steps/day previously reported American children 6-12 ages for years. When we compare to Council on Physical Fitness Awards program recommended 11.000 steps /day for girls and 13.000 steps /day for boys, our sample did not reach recommended steps/day.

Keywords: physical education, pedometer, gender differences



# **INVITED DELEGATES**

### Prof. Dr. Attilio CARRARO

Department of Biomedical Sciences University of Padua, Italy

### No health without mental health ... no mental health without physical activity

"Without mental health there can be no true physical health" (Chisholm, 1954) and physical activity (PA) can play a crucial role in promoting and maintaining good mental health condition.

Mental health is crucial to the overall health and well-being of individuals and societies, and there is strong evidence highlighting the bidirectional relationship of mental diseases, particularly depression and anxiety, with physical health outcomes. The heavy burden of mental disorders, during the whole lifespan, implies the search of new, cost-effective, holistic strategies to prevent and co-treat mental diseases and their complications. Scientific literature is showing increasing interest in the in the effects of PA on mental health. Regular participation in PA is associated with well recognized improved aspects of mental well-being and reduced symptoms of several mental health disorders. There has been consideration of the role of exercise and PA as: (i) a means of preventing the onset of mental health problems; (ii) a strategy to cope and manage mental illness; and (iv) a therapy for the treatment of mental illness and disorders. The key-objective of this paper is to discuss the role of exercise and of education to exercise and PA in the promotion of mental health and in the treatment of mental diseases. Moreover, results of an educational intervention targeted to motivate depressed patients to adopt active lifestyle will be synthetically presented.

Keywords: depression, education to exercise, exercise motivation, lifestyle, psychiatric diseases, sedentary behaviour

### Prof. Stefania CAZZOLI

President of APA Section (World and Europe) Fédération Internationale d'Education Physique (FIEP) Adjunct Professor Department Sport and Education Science University of Torino, Italy

# Physical education teacher training and promoting health and wellbeing of children by physical education based on evidence (pebe)

The Physical Education Teacher Training evolved oriented at building the competence for the culture and society of 3rd millennium. The humanity is going versus new life and work organization based on digital technology and sedentary life style (4th causes of death, WHO, 2002, 2004, 2010, 2015). The priority become to plan active life style programme in formal and non-formal education (community, sport organization), in-formal education (daily life). The formal education is opportunity for all the students to understand and to learn active competences about health and wellbeing in the childhood versus long life attitude and behavior. The research was based on the systematic review about international documents from 1978 till 2016. The analyses of primary sources were based on historical criticism: external (authenticity sources) and internal (credibility, consistency, accuracy) by UNESCO 1978, 2013, 2015; ICSSPE 2010; European Commission/Eurydice, 2013. The high quality of teaching need to provide development of multi-system teacher education oriented at the health and wellbeing: longitudinal/vertical continuity (time, long life learning) transversal/horizontal continuity (space, education based on multi-agency and stakeholder cooperation: University, School, Professional Community, Culture and Society). Innovative digital technologies and access at the scientific data (Physical Education Based on Evidence and Practice Based on Evidence). The digital technologies causes of sedentary and no health-wellbeing versus digital technologies opportunity for active life style and health-wellbeing understanding and knowledge school-based.

**Keywords:** physical education based on evidence, teacher, students, health, digital technology, active life style attitude & behaviour for well- being and peace



for Physical Education Pedagogy

# **INVITED DELEGATES**

### Prof. Dr. Jianhui DAI

School of Physical Education and Sports Science Soochow University, China

### The causes and preventive measures of injury accidents of physical education in China

An increasing number of injury accidents of physical education in China are concerned to the whole society in recent years. The purpose of this study was to find the causes happens in junior high schools and preventive measures of injury accidents of physical education in China. Participants of one independent cross-sectional survey, conducted in 2013, were students in Grade 7 and 9 from junior high schools in Wuxi, China. A total of 1300 students were analyzed finally. There are three main causes which are relevant to the risk of school physical education. They are the imperfect management system of school, the unsafe behavior of teachers, the inappropriate personal behavior of students. School responsible injuries caused by school sports facilities aging or improperly set, lack of regulation, inadequate of safety protection measures. Teacher responsible injuries caused by insufficient sense of responsibilities or protection to students, and unprofessional teaching methods by teachers. Student responsible injuries caused by students disobey of disciplines and rules of learning, individual physical specialty or disease during sports, technically incorrect action or sudden abnormal, and by other school mates' mistakes. Some preventive measures are put forward: set up the accident insurance system, strengthen the safety consciousness education, reinforce the school safety management system; enhance physical education teachers professional abilities and sense of responsibility, be well prepared of safety protection work for physical education content which easily lead to injuries; build up students safety archive, pay more attention to students with special physical and diseases.

Keywords: injury accidents, causes, preventive measures, junior high schools, physical education

**Thomas DOWENS** Development Officer for Education Scotland Glasgow, Scotland

### Better movers and thinkers - an innovative approach to physical education

Authors: T. Dowens\* & A. Dalziell\*\*

\*Development Officer for Education Scotland, The Optima Building \*\*University of Edinburgh

Recent research has confirmed a positive relationship between levels of physical activity and academic achievement. Some of these studies have been informed by neurological models of Executive Functioning (EF). There is a general consensus within the literature that the three core EF skills are; working memory, inhibitory control and cognitive flexibility. The development of these core EF skills has been linked with learning and academic achievement and is an essential component in the delivery of physical education using a new and innovative approach called 'Better Movers and Thinkers (BMT). The BMT approach's clear intention is to support and enhance the process of learning, by motivating children to engage in that process through purposeful physical activity, and use this activity to support the acquisition of key cognitive skills. This innovative approach to learning encourages children to make stronger



### **INVITED DELEGATES**

connections for learning across the wider school curriculum. It uses the fun and motivational potential of movement to fuel and support the development of better thinking skills. With the BMT session there will always be the presence of the key aspects of physical literacy, (balance, coordination, rhythm and timing) alongside the development of key personal attributes (perseverance, self-confidence), and a constant overlay of cognitive skills (cue recognition, decision making, sequential thinking) on top of the physical dynamic. The BMT approach champions moving, and thinking, and the essential relationship between both motor and cognitive abilities.

Keywords: physical education, academic achievement, executive function, moving and thinking

### Assist. Prof. Dr. Maria DINOLD

President's Committee, ICSSPE Centre for Sport Science and University Sports University of Vienna, Austria

# "Active Youth" - Possibilities and opportunities of mobile devices to measure and encourage physical activity of adolescents

### Authors: M. Dinold\*, I. Bittner\*\*, R. Diketmüller\*, & F. Mairinger\*

<sup>\*</sup>University of Vienna, Centre for Sport Science and University Sports <sup>\*\*</sup>University of Natural Resources and Life Sciences Vienna, Inst. of Landscape Planning

"New Media" (video and computer games) are often made responsible for the lack of movement and exercise of young people. The use of mobile devices such as smart-phones and tablet computers among this population has changed this situation. Instead of blaming media use for children's increasing home sedentariness and less physical activity the project "ActivE Youth" wants to examine the impact of the use of mobile devices (location based games, location based services, etc.) as possibilities and opportunities, particularly offered by mobile devices, to encourage movement and new mobility patterns of adolescents. This assumed influence has not been clarified enough so far. The beneficial setting of an interdisciplinary cooperation of traffic planners, landscape architects, and sport scientists allows to analyze the interaction between spatial conditions, traffic planning and motion aspects as well as health effects in an integrative approach in "ActivE Youth". Specific survey methods are applied in collaboration with the students from two different schools. Using triangulation as methodological approach, this multilayer phenomenon of youthful movement and youthful activity patterns is monitored from different perspectives. In the frame of a "living-lab", the possibilities for utilizing the mobile devices are explored together with the young people involved. It is expected that this approach can boost changes in mobility behavior. Based on various test cases, a toolkit "Youth Active Mobility Check" will be developed which should allow other (youth) organizations, municipalities and local authorities to implement the tool-set in their area and trigger changes in movement and mobility behavior.

**Keywords:** activation through mobile devices, adolescents, urban research, landscape planning, physical activity, accelerometer, public health, physical education, sport pedagogy



for Physical Education Pedagogy

# **INVITED DELEGATES**

### Prof. Dr. J. Larry DURSTINE

Distinguished Professor Department of Exercise Science, University of South Carolina, USA

### The art of exercise prescription: Chronic diseases

Daily physical activity and/or prescribed exercise programming reduces risk for most chronic health conditions and has a tremendous positive impact on primary disease prevention and secondary disease treatment. Because of the favorable daily affects of physical activity and planned exercise, exercise is viewed as a medicine used in disease prevention and treatment. The guidelines and principles for exercise prescription are based on a strong foundation of scientific information. This body of scientific information regarding exercise prescription for individuals with chronic diseases has increased significantly in the last two decades. Nonetheless, the application of these principles should not be completed in an exceedingly rigid and precise fashion. Rather, these procedures are principles and accordingly should be utilized with flexibility to meet the goals of the individual and with careful attention to any contraindications and limitations. Because individual physiology responses and adaptations vary considerably with differing disease conditions, the chronic disease management team must be prepared to modify exercise prescriptions in accordance with the exercise responses observed during individual participants. Consequently, development and implementation of the exercise prescription in a rigid, mathematic fashion is inappropriate. The role of the management team is to be aware of such limitations and use these scientifically developed principles in conjunction with their own experiences to adapt and implement a properly designed exercise prescription that is both effective in optimizing health-fitness benefits and ensures safety. Thus, the management team must recognize that the process of making an exercise prescription is an art as well as a science.

Keywords: physical activity, disease prevention and treatment, exercise safety

### Prof. Dr. Fatima ELFAQUIR

Professor of Higher Education at the National Institute of Sport and Training Management of the Ministry of Youth and Sports, Morocco

### For active and healthy fife

This research related to the importance of regular physical activity practice, in favor of health and well-being, for students, from four leading classes, aged between 9 and 12 years. They were selected to take part in a recreational program, based on the brain Break and Hop sport program. Awareness meetings were held with the Principal of the school and the teachers. Information seminars were offered to teachers and students on the Brain-Break program and Hop Sport, and also on the importance and benefits of physical activities for health. Much attention has been put on education of perception. This allows for a differentiated instruction, by providing to the teachers with example and issue incentives, to help the students, to reach their full potential. Students were encouraged, to develop their motor skills, their physical and mental abilities, and health and well being. In this context they could suggest sports and physical activities, also they were encouraged to invent, to imagine, new and original physical activities they wish to practice at school. The purpose thus is, to allow the students to enhance their physical skills. Also, to adopt the necessary skills, so as to understand and use information that enables them, to make good decisions regarding their health and well-being, particularly in relation to physical activity, diet and sleep. This change in approach is intended to help students to acquire and practice the skills necessary for the knowledge on physical and mental health, improve their ability to apply these skills and strategies to acquire more self -confidence, and adopt a healthy and active life for the rest of their live.

Keywords: brain break and hop-sport, physical activity, health, perceptions, skills, students



### **INVITED DELEGATES**

#### Assoc. Prof. Dr. Arunas EMELJANOVAS

Department of Health, Physical and Social Education Lithuanian Sports University, Lithuania

#### Lect. Brigita MIEZIENE

Department of Health, Physical and Social Education Lithuanian Sports University, Lithuania

#### Physical fitness and motor skills in primary school children

Good physical fitness (PF) and body composition lowers the future risk of diseases (Ortega et al., 2007). Fitness education and assesment is an important part of the total physical education program. A new, functional test battery was used to measure primary school children's PF (Fjørtoft et al., 2011). We performed two studies. Study 1 included 113 primary school children from grade 1 to grade 4. Study 2 included 129 first grade children. Results demonstrate that PF test battery developed by Norwegian researchers is a functional measure of health-related fitness in Lithuanian primary school children. Results of this study support the premise that poor PF relates to low physical activity (PA), extra sitting hours in leisure time. PA relates to higher and inactivity to lower endurance, which is closely related to cardiovascular health. Further, the relationship between motor skills and PF was investigated. The results showed that better object movement performance could be predicted by higher PA and better PF. While self-movement skills-only by better PF. Neither gender, nor weight, height or BMI were significant predictors. So, PF and motor skills are interrelated. Application of both of these test batteries in primary school children would enable health care authorities to collect reliable longitudinal data on a population level. As well as establish reference scales which could identify children who are at health risk. Both batteries could be also the tool to measure intervention effects of prophylactic interventions.

Keywords: physical fitness, fitness tests, primary school children

### Assoc. Prof. Dr. Andra FERNATE

Latvian Academy of Sport Education, Latvia

#### Changes in physical education for having healthy future generation in Latvia

The educational system of Latvia historically has been influenced by divorce political and cultural forces with different pedagogical aims and educational policies. Though the European countries elaborate or adapt different approaches to the development of strategies for promoting physical education and physical activity, the level of physical inactivity has decreased very slightly (only 1%) compared with the previous Eurobarometer survey in 2009 (Eurobarometer, 2013). The aim of this research is to explore the relationship between the reform of educational system and the character of changes in physical education in Latvia. Methods: theoretical analysis of scientific literature; review of key strategic documents for Latvia national and sectoral development; systematic-review of national best practices in promoting physical activity of children and youth. The main tendencies in the education reform during the last 30 years in Latvia reveal several economic, ideological and demographic challenges. The transition to a physically active learning educational institution instead of a teacher-centred school needs further improvement in terms of management and pedagogical processes at all levels.

Keywords: physical education, healthy generation, reform in education, physical activity promotion

Physical Education Pedagogy

# **GLOBAL FORUM 2016**

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# **INVITED DELEGATES**

### Assoc. Prof. Dr. Maya VAN GENT

Associated Professor Human Movement Science Department University of Fort Hare, South Africa

# Evaluation study of the "National School Nutritional Programm" and the "Tiger Brands Foundation" in-school breakfast programme in the lade frere and Qumbu districts of the Eastern Cape, South Africa

School nutrition programmes are widely regarded as excellent interventions to improve the health and well-being of children living in poor circumstances. South Africa's National School Nutrition Programme (NSNP) reaches approximately 8,8 million poor children daily. The recently introduced Tiger Brands Foundation (TBF) nutrition programme delivers breakfast in the form of fortified cooked porridge to approximately 50,000 children nationally. This study represents the first attempt to evaluate the outcomes of such programmes, and to assess their effects relative to one another. The study took place in the district of Lady Frere – one of the poorest rural areas of the Eastern Cape. Results indicated that despite high levels of poverty in the district, children at all of the schools showed lower rates of underweight and wasting than the national averages for children. The differences between learners at schools receiving the breakfast and those receiving only the NSNP suggest that the addition of a nutritious breakfast can positively shift stunting levels. In addition, learners at the schools receiving both nutritional interventions were significantly less likely than those receiving only the NSNP to be overweight or obese. These effects were particularly strong for girls. Both stunting and obesity are related to adult obesity as well as non-communicable diseases such as Type II diabetes and heart disease, protecting children from early obesity or stunting is a good return on investment. The findings also provide important evidence for the value of a breakfast programme in schools.

Keywords: nutrition, children, BMI, feeding progammes, stunting, overweight

### Prof. Dr. Kim C. GRABER

Department of Kinesiology and Community Health Director, Campus Honors Program Former President, AAHPERD Research Council Former President, NASPE Fellow #526, National Academy of Kinesiology University of Illinois, USA

### Professional socialization: Best practices in teacher education

Teacher socialization is a lifelong process that occurs as an individual learns the expectations, behaviors, and values associated with a particular career. It begins when children enter K-12 schools as pupils and continues into teacher education and throughout a teacher's professional career. The three primary stages of teacher socialization include (a) the appreciticeship-of-observation, (b) professional socialization, and (c) organizational socialization. Given the powerful influence of the apprenticeship-of-observation period, it is difficult for teacher educators to change beliefs about teaching that future teachers acquire as a result of their time spent as pupils in K-12 schools. Many new teachers abondon what they learned during teacher education once they encounter the realities of the profession and the powerful influence of students when they re-enter K-12 schools as certified teachers. Some teacher education programs, however, have been effective in instilling beliefs in future teachers that remain steadfast once they leave the influence of the teacher education program. The purpose of this presentation is to describe the three stages of socialization, with primary emphasis placed on best practices during teacher education that have the greatest potential for effectively socializing students into the profession.

Keywords: teacher socialization, teacher education, best practices



### **INVITED DELEGATES**

### Prof. Dr. Verónica VIOLANT-HOLZ

Department of Didactic and Educational Organization, Faculty of Education University of Barcelona, Spain

### Prof. Dr. Myriam GUERRA-BALIC

FPCEE-Blanquerna. University Ramon Llull, Spain

### Design, implementation and evaluation of the Brain Breaks program

Authors: V. Violant-Holz', M. Guerra-Balic", M. Luisa de Fuentes', E. Carrillo", S. Barnet", J. Calvo', Q. Llorca', & S. Muñoz""

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The aim of this research is to present a methodological design for a proposal based on the Brain Breaks program which belongs to the HOPSports with university students from the UB and URL, and evaluating the benefits obtained after an intervention. The study is based on a multimethods design (selective and observational methodology), developed in 5 phases: 1/ Design of "My Brain Breaks Passport", which gathered the different measures evaluated: psycho-emotional, fitness, and nutritional; 2/ Implementation of the program including the passport to collect data and the physical activity intervention with the HOPSports and ad-hoc videos; 3/ Focus groups with different agents taking part of the project; 4/ Analysis from the collected data, including the content analysis with an inductive way, controlling data's quality and guaranteeing the coding reliability (Anguera, 1990). Information of two dimensions were obtained: **didactics**, the information regarding the method, the motivation and the project as a resource itself; and **personality profile**, that corresponds to the answers given by the participants depending on their own profile and personality style, both students and professors and 5/Conclusions about the program development, the differences and similarities between university and school participants; new proposals for school participants and recommendation about Didactical adaptations at the university. Future research is needed focusing on: 1/ preschool and primary teacher training degrees 2/ involving new university participants and 3/ applying the program in other contexts (Hospital School and School for children with Special Needs).

Keywords: GoFPEP-2016, brain breaks passport, HOPSports intervention, multimethods, university students



for Physical Education Pedagogy

### **INVITED DELEGATES**

**Dr. Deniz HÜNÜK** Faculty of Sport Sciences Department of Physical Education and Sports Teacher Education Pamukkale University, Turkey

### Action research: Best practice in teacher professional development

### Authors: D. Hünük\*, & Z. Kavak Cetinyurek\*\*

- \* Pamukkale University, Denizli, Turkey
- \*\* Physical Education Teacher, İzmir, Turkey

Action research is a professional development strategy in which teachers inquire about and reflect on their own teaching in order to better understand and improve their practice. Action research provides valuable opportunities for teachers to improve their practice, their understanding of their practice, and the situation in which their practice takes place. Moreover, action research empowers teachers to critically examine an experience that demonstrates their potential to be influential researchers within their educational situations. Through action research, practitioners systematically investigate their practice by: generating questions; planning, gathering and analysing data; making sense of their experiences in order to adapt their learning to their teaching practice; and collaboratively sharing actions and ideas with other people. Even though action research has been promoted as a tool for teacher professional development, much has been written about the need for PE teachers to be more reflective about their practice through AR (Almond and Thorpe 1988; Kirk 1995; Martinek and Butt 1988). Therefore, in this presentation, it is aimed to highlight the importance of teachers continuing to learn and develop their practice throughout their career by using action research.

Keywords: action research, teacher-researcher, reflection



### **INVITED DELEGATES**

### Prof. Dr. H. Serap İNAL

Faculty of Health Sciences, Department of Physiotherapy and Rehabilitation Yeditepe University, Turkey

### Dance for people with disabilities

Dance is not only an art form, but also a physical activity that may require highly vigorous bouts of aerobic as well as anaerobic activity. The rhythmic movement of body parts, usually executed to music, is a wonderful medium for expression for people with or without disabilities. Since in some dance forms there is no right or wrong way to perform, unlike some other forms of physical activity or sport, dance can be performed by people having different disabilities as physical, intellectual, emotional, cognitive, visual, hearing disabilities or having chronic diseases or autism. Thus, by its nature dancing encourages people with disabilities to discover and express themselves, to enjoy and have fun, to share their feelings with other people and to improve their socialization. Dance can also be practiced in any age, and effective in improving the cognitive status of elderly, people with Parkinson's disease, and dementia as well as Alzheimer's disease, but at the early stages of the disease. Thus, this presentation aims to share the benefits of dance for individuals with disabilities or chronic diseases, as well as the disability dancing styles to increase awareness on dance as leisure but also as an effective physical activity.

Keywords: Intellectual disability, physical disability, visual disability, autism, elderly

### Assoc. Prof. Dr. Maryam JAHROMI

Department of Physical Education & Sport Sciences Shiraz University, Iran

# The effects of jump rope training as a part of elementary school physical education in Iran on body composition and physical fitness Indices in female students

### Authors: M. K. Jahromi & S. Bahmannezhad

Physical Education & Sport Sciences Department, School of Education and Psychology, Shiraz University, Iran

Physical education in Iran has experienced some innovations and progress during 2010-2014. Including swimming, gymnastic and jump rope as obligatory parts of elementary school physical education schedule was one of the innovations. The purpose of this research was to evaluate the effects of eight weeks jump rope training program on body composition and physical fitness indices of female students of fourth grade. The subjects of the study were female students of the fourth grade in elementary school (age: 10-11 years old). The 48 subjects of this study were selected and divided in to two groups of experimental (number: 28) and control (number: 18) groups randomly. The experimental group participated in the jump rope training two sessions (every session 45 minutes) in a week for 8 weeks. Study variables including percentage of the body fat, muscles explosive power, agility, and static balance (using body composition analyzer, vertical jump, Zigzag test, balance platform, respectively) were measured before and after the training program in both groups. The statistical test of analysis of covariance was used for data analysis. The jump rope training induced no significant effect on agility (P=0.71) and muscle mass (P=0.06). But caused significant positive effect on decreasing of body fat percent (P=0.01) and increasing of explosive power (P=0.02) and static balance (P=0.001). Jump rope training can be recommended to improve the balance and explosive power and decrease body fat percent in elementary school female students.

Keywords: jump rope, physical education, body composition, physical fitness



for Physical Education Pedagogy

# **INVITED DELEGATES**

**Dr. Gerda J. JOUBERT** BASA President BASA (Biokinetics Association of Southern Africa)

### BASA (Biokinetics Association of Southern Africa) and the WoW! Project

The presentation introduces the professional body (BASA) representing the profession of Biokinetics in Southern Africa. Biokineticists forms part of the multi-disciplinary medical team attending to health maintenance in South Africa. The Biokineticists focus on combating NCD's, improving health and optimizing physical performance through the prescription of scientifically based exercise programs. BASA makes use of different technological options to communicate with its members and to ensure that continues education of the Biokineticist takes place. The public is also being informed of the role that the Biokineticist plays in the maintenance of health by using various forms of media technology. Network opportunities within BASA will also be discussed. The presentation will also introduce a current project being conducted in the Western Cape province of South Africa. It is the WoW! project (Western Cape on Wellness). The project was initiated by Dr Frederik Marais of the Western Cape Government and partnered (among other partners) by BASA. This project aims to promote a healthy lifestyle by increased physical activity, healthier eating and maintaining a healthy weight in order to prevent and reduce the burden of NCDs (including obesity). The project is being implemented in three different settings: the worksites, schools and communities.

Keywords: BASA, technology, network, LTMIC (Life through Movement International Conference), WoW!-project

# Assoc. Prof. Dr. Gregor JURAK

Faculty of Sport University of Ljubljana, Slovenia

### Usability of the SLOfit: Case of the healthy lifestyle intervention

### Authors: G. Jurak, G. Starc, M. Kovač, & J. Strel

University of Ljubljana, Faculty of Sport, Ljubljana, Slovenia

The purpose of this paper is to show the usability of the Slovenian national physical fitness monitoring system the SLOfit on the case of the school-based intervention Healthy lifestyle. This intervention was introduced in 30% of Slovenian primary schools in 2010 on the research-based evidence from the SLOfit monitoring and it includes approximately 30,000 children from 6- to 14-year old. The program supplements the existing hours of physical education (PE), taught by PE teachers. In such way, all students involved in this program, have 5 hours of PE per week. The intervention focuses on health enhancing physical activity, it is free of charge, open to anyone, but aimed especially at children who are not engaged in out-of-school sporting activities. The intervention has a really important impact on decrease of overweight and obesity among children. Before the intervention, prevalence of overweight (including obesity) was 19.6% and after 5 years of intervention positive effects are even more visible on physical fitness of children. The share of unfit children has decreased from 13.7% to 12% (p≤0.001). Politics, schools, parents of the children and media have got evidence-based feedback about the effects of intervention on physical fitness of children. This gave more public attention to the SLOfit and we have persuaded the government for new intervention, called Youth for Youth, which targets on physical fitness of students of vocational schools.

Keywords: physical activity, intervention, children, physical fitness, monitoring, overweight, obesity, primary school



### **INVITED DELEGATES**

### Prof. Dr. Eid KANAN

Former regional coordinator for Asia (ICSSPE) Lecturer in curricular and instruction and physical education Yarmouk University, Jordan

# The impact of action and movement stories on the development of movement performances of primary school students in Jordan

This study aimed at the identification of the effect of using the movement and action story on developing movement performances of first primary children. The problem of the study was formulated by the following question: 1) what is the effect of the movement and action story on developing the basic action and movement skills of first primary children according to method and gender variables and their interaction? To answer this question, the researcher intentionally selected a sample consisting of two equal groups (62) male and (62) female children. The study was conducted after ensuring the equivalence of the two groups and obtaining validity and reliability coefficients. The teaching method used movement and action story. The findings revealed statistically significant differences between the experimental group and the control group. The children in the experimental group out performed their peers in the control group in their performance of all the target basic actions.

Keywords: action story, motor skills, Jordan

### Prof. Dr. Elke KNISEL

Faculty of Human Sciences, Department of Sport Pedagogy Otto von Guericke University Magdeburg, Germany

### Technology in physical education – How to increase the level of physical activity of young people

Many studies show that physical activity of young people does not meet the recommendations of the WHO of at least 60 minutes each day to promote health. There seems to be a need to improve physical activity and Physical Education Class is the best setting to implement strategies. The purpose of the intervention study was to improve the level of physical activity in Physical Education class. Participants were 150 students (78 girls, 72 boys) aged 10-16 years old (M=12.71; SD=.47). The intervention consists of a new didactical approach to promote students' self-regulation by offering options of contents and methods by the teacher, free choice periods and encouragement and hints by the teacher to promote decision-making, self-motivation, and coping with failure and negative emotions. The moderate-to-vigorous physical activity (MVPA) was measured by accelerometer and steps count. We found a significantly higher level of MVPA in the intervention group compared with the control group. Additionally, the students of the intervention group did more steps. For further improvement of physical activity in Physical Education class it seems to be important to (1) use new technology and measurement to monitor students' level of physical activity, (2) introduce topics with a higher activity level as ball games or fitness training, and (3) to develop and implement new teaching approaches with a health didactical framework and a classroom-based methodology.

Keywords: physical activity, physical education class, self-regulation



for Physical Education Pedagogy

### **INVITED DELEGATES**

### Assist. Prof. Dr. Ferman KONUKMAN

Section Editor, Journal of Physical Education, Recreation & Dance (JOPERD) Assistant Professor of Health & Physical Education in Sports Science Program Qatar University, Qatar

### Teaching sport skills to children with autism in physical education

Autism is a lifelong developmental disability that causes delays in verbal and nonverbal communication and social interaction as well as exhibition of ritualistic and compulsive behaviors (Loovis & Ersing, 1979). Autism is a brain disorder that impairs a person's ability to communicate, form relationships, socially interact, and respond appropriately within a given environment. Children with autism have severe communication, language, and social interaction problems compared to their nondisabled peers. Children with autism have several difficulties in four general areas: Speech, language and communication; relating people, objects, events; responses to sensory stimuli; developmental discrepancies (Houston-Wilson & Lieberman, 2003). Children with autism have several stereotypical motor behaviors (e.g. swinging their bodies backward and forward, playing with their fingers, moving their head in a circular motion and jumping). These behaviors cause communication and learning problems for children with autism. However, it is possible to reduce these behaviors via teaching physical activity and games (Leaf & McEaching, 1999; Smith, 2001). Several studies found that physical activity interventions such as jogging and ball throwing, swimming, and vigorous physical activity reduced stereotypical motor behaviors (Yılmaz, Konukman, Birkan& Yanardag, 2010; Yanardag, Birkan, Yilmaz, Konukman, & Lieberman, 2011). Teaching games and physical activity is an important need to improve vital social skills of children with autism (Maurice, Green, & Fox, 2001). Therefore, the purpose of this presentation is to provide basic strategies and tips for teaching sport skills to children with autism in physical education. In addition, information about our recent research efforts in teaching sport skills for children with autism and practical applications will be discussed.

Keywords: autism, sport skills, physical education

### Assoc. Prof. Dr. Oleksandr KRASILSHCHIKOV

Vice-President, International Physical Activity Projects Exercise and Sports Science Programme, School of Health Sciences Universiti Sains Malaysia, Ukraine

# Effects of multilateral development programme on the fitness profile of 8-10 years old Malaysian children

### Authors: W. Wan Mahadi\* & O. Krasilshchikov\*\*

\*National Institute of Sport, Malaysia \*\*Universiti Sains Malaysia, Malaysia

Adequate growth and development of children requires comprehensive programme of elementary fundamental movement skills in primary school embodying a well-planned and well executed learning experience to meet the current and projected individual needs of the children. This can be achieved through the Multilateral Training Programme targeting multilateral development which has been known for its benefits for schooling aged children.



### **INVITED DELEGATES**

It is believed that certain range and volumes of physical activities are supposed to be delivered by school physical education, however there are doubts spoken out nationally and internationally (quite often unchecked) whether those activities are adequate for children's growth and development stimulation. In the absence of proper research, this issue becomes a problem for school physical education. A total of 240 subjects were assigned to three experimental groups in boys and three in girls aged 8, 9 and 10 who have been involved in Multilateral Physical Education (MPE), whereas same number of control groups of the same ages - in Standard Physical Education (SPE) commonly conducted in Malaysian schools. In all three age groups, almost every fitness variable has improved after one year of multilaterally arranged physical education programme in both genders. Conversely, standard physical education programme has not contributed to the improvement of any of the tested physical fitness variables. At the most, the level of the motor guality in guestion has been maintained.

Keywords: multilateral development, physical education, Malaysian school children

### Assist. Prof. Dr. Ida LAUDAŃSKA-KRZEMIŃSKA,

Senior lecturer Department of Physical Activity Study and Health Promotion Poznan University of Physical Education, Poland

### Juniors for seniors - Physical activity and health promotion in school setting

Nowadays, many countries are facing the epidemic of obesity and lack of physical activity problem. Therefore, there is a need to create necessary skills and competency for responsible care for health, especially among children. In this context physical activity and health promotion should be an important part of school-based activities. There are some recommendations how to implement the physical activity and diet in school settings (WHO 2009, CDC 2011). The most important one is to use multi-component approach, which means e.g. to involve family members in such intervention. The purpose of this study is to show proposal of implementation those strategies prepared within European project called DEDIPAC - Determinants of Diet and Physical Activity. This 15-week intervention is called Juniors for Seniors and covers children and their parents. The Eurofit Fitness Testing Battery, anthropological measurements, body composition and questionnaires from HBSC survey were used. Improvements in almost all health related fitness parameters among parents and kids were noticed. There were also noticed improvements in some eating behaviour, increase in time spent with family, increase in leisure-time physical activity (among parents and children) and decrease in computer-time on school days among children. These programme has been also designed for testing the new toolbox prepared for health promotion practitioners, policy-makers and researchers. The toolbox is a web-based, open access instrument of best-practice and state-of-the-art research methodologies according to the preparation of health interventions and health promotion programmes. This toolbox can be used for developing, monitoring and/or evaluation a policy or multi-component intervention on physical activity, sedentary behaviour or dietary behaviour.

Keywords: physical activity, intervention programme, school setting, toolbox, children, parents



for Physical Education Pedagogy

## **INVITED DELEGATES**

### Assist. Prof. Dr. Margaret Jip KUO

Department of Tourism and Leisure Management China University of Technology, Taiwan

### Exercise and nutrition make the best of you

In this presentation, we first explain basic concept about nutrition: You are what you eat. Nowadays childhood obesity is a huge health and economic issue around the world, and this problem highly related to diet and exercise. Scientists use technology to demonstrate best examination in body composition. It is more important to have accurate body fat than body weight. We also emphasis the concept of personalized training and nutrition plan and will explain the career as a sports dietitian. Review papers on sports nutrition and discuss the role of nutritional supplement and ergogenic aids. A variety of dietary practices designed to enhance acute responses and chronic adaptations to resistance training have been examined. From a scientific and practical perspective, the quantity, quality, and timing of nutrient ingestion around a workout are important factors to consider. The amount, type and timing of protein consumption all play critical roles in promoting protein synthesis. Dietary protein intake for athletes should include some foods with high biological value. Adequate energy intake to meet the needs of training and carbohydrate intake sufficient to maintain glycogen stores are important as well. The early provision of carbohydrate and protein early after an exercise session will enhance protein balance and optimize glycogen repletion. Conclusion: It is needed to have a qualified sports dietitian to provide individualized nutrition direction and advice after a comprehensive nutrition assessment to active people. Well balanced diet is more important than supplement and ergogenic aids.

Keywords: well balanced diet, body composition, personalized nutrition plan, sports dietitian, eat to win

### Daga MAKAZA

Faculty of Applied Sciences National University of Science and Technology, Zimbabwe

# Nutritional status, knowledge, attitudes, nutritional and physical activity practices of Zimbabwean primary school children: The Zimbabwe baseline study

Authors: D. Makaza\*, P. Makoni\*, B. Khumalo\*, M. Mazula\*\*, K. Dlamini\*, E. M. Tapera\*, M. Banda\*, M. P. D. Gundani\*, T. F. Mlalazi\*, & C. N. Chaibva\*

\*National University of Science and Technology, Zimbabwe

\*\* Bulawayo Polytechnic, Zimbabwe

Non communicable diseases are the leading cause of death in the world due to physical inactivity and unhealthy eating. The purpose of this study was to collect baseline data on the knowledge of nutrition, attitudes towards nutrition, physical activity and nutritional practices and status of Zimbabwean primary school children. Data was collected using self-administered standard questionnaires to 4402 children. Weight and height were measured. The majority of the children was knowledgeable about healthy foods and liked them. The majority indicated that potato crisps, "take away" foods and fizzy drinks are good for their health and liked the foods. Most children took water after meals, had breakfast the previous morning and spend less than one hour playing after school. A large number of the children had not watched television the previous day and most did not play electronic games. Most children walked to school and participated in sports. The car, walking and bicycle were the preferred means of transport. The children had normal Weight for Age, Height For Age And BMI For Age. The girls were significantly taller and heavier than the boys. The knowledge, attitudes and practices of children were at acceptable levels in all food groups except for fatty, salty and sugary foods. Almost half of the children meet the WHO physical activity guidelines. This study population does not spend worrying amounts of time on electronic games and watching TV. The majority of the children walked to school. A nutrition education intervention is recommended for Zimbabwean primary schools

Keywords: nutrition, knowledge, attitudes, practices, physical activity



### **INVITED DELEGATES**

#### Dr. Victoria E. MACHOTA BLAS

Head of Physical Education Department Secondary School "Antonio Hellín Costa", Spain

#### Gamification in physical education

Education in the 21<sup>st</sup> century is under consideration. Teachers are more than ever pondering over new educational methodology changes, as well as their role of educators. The dynamics of games in non-game contexts known as "gamification" has become an innovative approach in education. Progressively, games have been consolidated as powerful learning tools. The so called "digital natives" (Prensky, 2001) learn and engage with the world in ways a new pedagogical framework is inevitable. This presentation will consider digital game play from an educational perspective so creating a meaningful and motivating experience for digital generation students within Physical Education. In an effort to shed light on what gamification is, here we offer an outline of a review of the available literature and the effective game dynamics to be addressed when applying games in education (Stott & Neustaedter, 2013). Furthermore, a program intervention implemented in the setting of Physical Education in secondary schools to encourage daily physical activity through gamification is described. Early results would be indicating that gamification is key to engage students distracted by technology and game playing with a lack of motivation and engagement in Physical Education lessons.

Keywords: gamification, physical education, education, technology

### Assoc. Prof. Dr. A. Dilşad MİRZEOĞLU

School of Physical Education and Sport Abant Izzet Baysal University, Turkey

# Views, achivements and implementations of pre-school teachers regarding movement education workshop

### Authors: A. Mirzeoğlu\*, F. Altay\*\*, & S. Sert\*\*\*

\*School of Physical Education and Sport, Abant İzzet Baysal University, Bolu, Turkey \*\*Faculty of Physical Education and Sport, Hacettepe University, Ankara, Turkey. \*\*\*Pre-school Teacher, MEB, Bolu, Turkey.

The importance of movement skill development programs during preschool stage is controversial. Therefore, it is important is to understand the movement competency for the development and protection of active and healthy life style, well-planned and effective programs for children in early childhood stage is significant. However, in numerous studies, it was determined that majority of preschool teachers supported physical activity in preschool stage, and that they had limited knowledge and little competency to teach physical activities. Therefore, the aim of this study was to determine the views, achievements and applications of preschool teachers regarding the workshop on fundamental movement skills. In this study qualitative research design and action research approach were used. 10 female volunteers, who were preschool teachers from Central district in Bolu province during 2014-2015 academic year, spring semester, participated in the study. Research data were collected by the drawings, open-ended questions and focus group interviews of preschool teachers. Content analysis was used to analyze the data. According to the findings, teachers stated that workshop cause the improvement of their knowledge, skills and self-confidence about movement education and help them to overcome the problems they experienced with teaching of this subject. However, they determined that they use larger muscle activity in class and outside space, they can design a variety of activities and materials, and stated that they also become more active individuals. Another important effect of the workshop on the teachers was encouragement of the teachers to collaborate between the members of their own professional group.

Keywords: movement education, early school education, teacher, view and implementation



for Physical Education Pedagogy

## **INVITED DELEGATES**

### Dr. Mohammed Hamdan HASHEM MOHAMMED

Department of Physical Education King Fahd University of Petroleum and Minerals, Saudi Arabia

### King Fahd University contributions in promoting physical activity and health for their community

Physical activity is known to have various health benefits. But the prevalence of physical inactivity in Saudis aged 15-65 is 66.6%. There is also a high prevalence of diseases related to physical inactivity in Saudi Arabia. Diabetes prevalence among Saudi adults is 17.6%, while obesity prevalence among Saudis 15 years and older is 28.7%. King Fahd University of Petroleum and Minerals (KFUPM) has provided several incentives in the last five years to promote health through education. The incentives can be divided into three categories: (i) Provision of quality physical education syllabi, (ii) social sports games and (iii) short courses. Quality physical education syllabi include providing health education to university students in their first two years, teaching fundamental game skills and rules, and conducting health-related fitness assessments of students. Social sports games are provided to the KFUPM community. The aims are for students to practice the fundamental skills they were taught, for community members to reduce stress and have fun, and for community members to know each other. Activities include interclass competitions for university students, and exercise events such as Annual Rector's Cup. Short courses are provided to KFUPM community members not enrolled in any formal physical education course. Fundamental game skills and rules are taught in these short courses.

Keywords: physical activity, health education, physical education

### Prof. Dr. Hanlie MOSS

Physical Activity, Sport and Recreation (PhASRec) North-West University (Potchefstroom Campus), South Africa

# Physical activity intervention at a primary health care clinic for optimal health: the B-Healthy project [250]

Authors: S. J. Moss\*, R. G. Oviedo\*, N. Tamulevicius\*, S. Czyz\*, S. Makamu\*, C. Madise\*, & M. Cameron\*\* \*Physical activity, Sport and Recreation, Faculty of Health Sciences, Nothr-West University, Potchefstroom. \*\*School of Sport and Exercise Science, University of the Sunshine Coast, Australia

In South Africa, healthy lifestyles are challenged by alcohol abuse, smoking, and high levels of physical inactivity. Engaging in regular PA is a cost-effective intervention when many persons are targeted at the same time. There is strong evidence that exercise and regular PA can positively influence health by reducing the rates of mortality, coronary heart disease, stroke, metabolic syndrome (MetS), type II diabetes (DMT2), breast cancer, colon cancer, depression, and falling. The effects of PA and exercise interventions on health measures of black South African from low-resourced communities are scares. The B-healthy project therefore aims to determine the effect of a controlled exercise intervention on the health-related quality of life, fitness, functionality and risk factors for non-communicable diseases. A sample of 100 participants aged 35 - 70 years are recruited to an exercise intervention group and 100 participants to the control group. The proposed intervention will be conducted for 6 months with one exercise intervention per week. Measurements will be performed at baseline, 3 months and 6 months' post intervention. The exercise intervention will be composed of aerobic exercises, muscle strength and endurance exercises as well as balance activities. The outcomes to be measured with the study is, mental and physical components of health, body composition, resting blood pressure, peripheral glucose and cholesterol, habitual physical activity patterns for 7 consecutive days and cardiorespiratory fitness. The project will substantially contribute to the knowledge on risk factors for NCDs in black Africans from low resourced communities and the effect that a regular exercise intervention has on the outcomes after three and six months.

**Keywords:** exercise, low-resourced community, black adults, quality of life, functional ability, habitual physical activity and fitness



### **INVITED DELEGATES**

### Prof. Dr. Toho Cholik MUTOHIR

Rector, Institute of Teacher Training and Education, Mataram, NTB, Indonesia Faculty of Sport Sciences State University of Surabaya, Indonesia

# Improving the quality of physical education and sport for developing students' character: A case of Indonesia

### Authors: T. Mutohir<sup>\*</sup>, M. S. Mahardika<sup>\*</sup>, M. Muhyi<sup>\*\*</sup>, J. Miftakhul<sup>\*</sup>, & P. Olievia<sup>\*</sup>

<sup>\*</sup>Faculty of Sport Science, State University of Surabaya, <sup>\*\*</sup>IKIP Mataram, Indonesia

Physical education and sport (PES) in Indonesia has been criticised for being ineffective and under the crisis. This condition is caused by various factors including lack of competent teachers, reduced time allocation for PES activities, inadequate support facilities, and budget cuts. At present, the teaching-learning process of PES has failed to achieve its objectives. This is due to various factors including: lack of knowledge and competencies of PE teachers in regard to curriculum K13 and its implementation; limited students-teacher meaningful interactions; and traditional attitudes of teachers which teaching is orientated toward sport-performance rather than health-related fitness, cognitive and affective development. The low quality of PES, manifestated as limited participation in PES and other forms of physical activity, have resulted in the negative development of children's physical, mental, social, and intellectual development. One of the critical conditions that is becoming a national issue is concerned with the moral decadence among students. The data indicates that the condition of morality among students is unsatisfactory. This can be viewed from the increasing incidence of unethical behaviors including drug abuse, cheating, bullying, fighting among students. There is a current need for the Indonesian Government to improve the quality of PES for developing children's potential including attitude, knowledge, and skills through the implementation of the balanced developmentally appropriate curriculum (K13). Innovative efforts should be conducted to improve the quality of PES and other forms of physical activity among school children in order to achieve the objectives of PES which emphasizes on character development.

Keywords: quality, physical education, curriculum, character development

### Riitta PÄÄJÄRVI-MYLLYAHO

Physical and Health education teacher Vaasan Lyseon lukio, Finland

#### Finish schools on the move and new curriculum in schools

During the last years my main goal has been to promote physical and health education in Finland by trying to get more p.e. lessons to school and more activities to students during the school days. I have been a member of many working groups and the result of our efforts was rather good. In our new curriculum we are getting more p.e. lessons and "Finnish schools on the move" is already in 1000 schools in our country. Finnish Scools on the Move –program started in 2010, because children didn't move so much anymore. Finnish Schools on the Move –research made by LIKES-research center in Jyväskylä 2010-2015 showed, that pupils are sitting most of the time they spent at school, and that time increases when the pupils get older. That's why it was time to do something to this kind of evolution. In this program the main goals at school are: to get pupils active on the way to school and during breaks, also during other classes, clubs and other activities after school and they have to have opportunity to move and be active independently within the school area. In physical education classes we will start a new curriculum next autumn and there will be two more P.E. classes in comprehensive school. Also the teaching will change. The aims are to instruct and help students strengthen their balance and coordination skills and handling different equipment, but also instruct them to apply those skills in multiple situations, different learning environments and seasonal variations.

**Keywords:** sitting, passive time, activity, physical education, classes, balance, coordination skills, handling different equipment



for Physical Education Pedagogy

## **INVITED DELEGATES**

### Dr. Andanje MWISUKHA

Department of Recreation Management and Exercise Science Kenyatta University, Kenya

# Extent of preference for selected social constructs of learning environment by physical education students in Kenya's universities

Extent to which learners grasp content delivered by their teachers is influenced significantly by the prevailing classroom environment. Classroom environment encompasses physical setting, social interaction and other instructional components relating to students and teacher characteristics and behavior. These attributes have either negative or positive influence to learners' instructional outcomes. This study therefore, aimed at assessing extent of preference by Physical Education (PE) students in Kenya's universities for social characteristics of learning environments that included attributes of classroom composition (single or unisex, pairing or grouping of learners on basis physical and intellectual abilities, freedom of choosing group-mates) and class size (small or large). A modified version of the Individualized Classroom Environment Questionnaire was used for data collection from 109 (86%) PE students in Kenya's universities. The findings indicated the learners' preference for unisex classes and being grouped or paired with classmates who had similar physical and intellectual abilities for group assignments. They preferred belonging to small classes and being given freedom to choose classmates with whom to carry out group tasks irrespective of their gender and year of study. The study recommends that PE educators and university authorities be sensitive to the social units in learning environments so as to optimize learning. PE lecturers should avoid separating the male students from the female in PE lessons and should ensure their compatibility when assigning them group-based activities.

Keywords: learning/classroom environment, physical education, university

### Prof. Dr. Roland NAUL

Institute of Sport & Exercise Sciences, Department of European Studies in Physical Education and Youth Sport University of Muenster, Germany

# Web-based self-monitoring of physical activity and health for children and adolescents - a reference tool for BMI and motor competence evaluation for individual students and their school classes

#### Authors: R. Naul, T. Utesch, D. Dreiskämper, & M. Hoof

Institute of Sport & Exercise Sciences, University of Muenster, Germany

Recently published reviews (Dobbins, et al, 2013; Wang et al, 2013; Bemelmans et al., 2014; Mura et al., 2015; Naul & Cloes, 2015) on reduction of overweight and physical inactivity of younger children document different cross-sectoral approaches to include stakeholders for HEPA intervention studies. However, an integrated approach must include at least four sectors of representative stakeholder groups (e.g. parents, schools, sport clubs, and local community offices). The intervention project "healthy children in sound communities" (HCSC et al., 2012) has been based on the socio-ecological model of Sallis (2006) at local community level. A weekly schedule including different curricular and non-curricular physical activities of daily 60 to 90 minutes (Naul et al., 2012) has been established in more than 60 Dutch and German primary schools classes to target BMI and basic motor development. Subsequently, the authors of this project present a multilingual online-database that facilitates monitoring of BMI, physical/motor competencies and age/gender related cut-off points for different health factors. The online-database enables juvenile self-monitoring through health education infotainment and gamification and offers for individual children and adolescents, their school classes and all school forms as well as for their parents, teachers and youth sport coaches comparable feedback data of health development.

**Keywords:** web-based data bank, self-monitoring, BMI, motor development, HEPA, socio-ecological model, local network, cross-sectoral approach



### **INVITED DELEGATES**

### Assoc. Prof. Dr. Nara Rejane C. OLIVEIRA

Institute Health Society Human Movement Science Department Federal University of Sao Paulo (Campus Baixada Santista), Brazil

### Physical activity and health in Brazilian early childhood education

The purpose of this study was to discuss the characteristics of the early childhood education in Brazil and the challenges to development the physical activity and health in this context. In Brazil, the early childhood education is the first stage of the basic education to children up to 5 years old. It should provide institutional education, ensuring for each child: growth, development and learning; a safe and stimulating environment; right to play; individual attention and health. From this perspective, the health promotion includes movement, hygiene, nutrition and right to rest. The movement is considered a language and essential for a child to develop properly and healthy. However, in day-to-day school life, the considerable difficulties that teachers have in thinking about movement in a holistic perspective can be recognized. Furthermore, the challenges to development the physical activity and health in Brazilian early childhood education can only be understood in the context of some aspects, linked each other: the Brazilian demography, the education infrastructure and quality, teacher training and development of research, and the relationship between theory and practice, considering the principles of the public policies.

Keywords: child, preschool, child care, motor activity, health education, health promotion

Assoc. Prof. Dr. Selhan OZBEY Department of Sport Management Celal Bayar University, Turkey

The effectiveness of the peer education programme for health promotion on smoking, nutrition and physical activity among students who attend primary and secondary schools in Manisa-Turkey (2011- 2015)

#### Authors: S. Özbey\* & Life-Hayat\*\*

\* Department of Sport Management, Celal Bayar University, Manisa, Turkey \*\*Project Team of Life Hayat

It is important to gain healthy life behaviours on tobacco, nutrition and physical activity among young people. This study was planned evaluate the effectiveness of a health promotion programme including peer education on smoking, nutrition and physical activity among young people in Manisa. The interventional study was carried out among young people who attend 32 primary and 14 secondary schools in Manisa between March 2011 - February 2015. The data were collected by self reported questionaires in March 2011, in May 2012 and in May 2013. The study team also facilitated sportive activities and activities telated nutrition in schools. Of the peer volunteers, %41.7-52,5 reported they always talked about healthy life style with their friends, 40,8-65,9% thought they were helpful for their friends to gain knowledge about project issues. Among primary schools' students, the percentages of having breakfast, eating lunch, having dinner, eating dairy products every day were higher among intervention group compared to control group (p<0,05 for al the comparisons). Among secondary schools students, the percentages of having breakfast, not to eat jung food were higher among intervention group compared to control group (p<0,05 for al the comparisons). Being certified player and having a bicycle among primary schools students (ln 2013 and in 2014), having a bicycle among secondary schools students (ln 2013) were higher among intervention group (p<0,05 for al the comparisons).

Keywords: peer education, smoking, physical acitivity, health nutrition, young people



for Physical Education Pedagogy

### **INVITED DELEGATES**

### Prof. Dr. Boyanka PENEVA

Department of Theory and Methodology of Physical Education National Sports Academy "Vasil Levski", Sofia, Bulgaria

### Assoc. Prof. Eleonora MILEVA

Department of Psychology, Pedagogy and Sociology National Sports Academy "Vasil Levski", Sofia, Bulgaria

# The interdisciplinary Bulgarian paneurhythmy system and Rudolf Steiner's Eurhythmy system as a means for relax at schools

### Authors: P. Boyanka & E. Mileva

National Sports Academy, Sofia, Bulgaria

Paneurhythmy is a Bulgarian kind of gymnastics, dance or method introduced by Peter Deunov (the Master Beinsa Douno) in the first half of XX century. Some authors determine paneurhythmy as a science as well: "science of the harmonious, conscious movement, based upon the laws of the Living Nature". Translation of the term means "Supreme Cosmic Rhythm". Paneurhythmy consists of a sequence of exercises, danced under music accompaniment of violin(s) with poetic text at the same time. Paneurhythmical gymnastic complex consists of 28 exercises or paneurhythmic forms. These exercises are fulfilled early in the morning from 22 March until 22 September for the people from the North Hemisphere and always in the open air. Logically for the people of the South Hemisphere they must be played from 22 September to 22 March. As paneurhythmy is already built and unchangeable system nobody has the right to introduce some changes in it. But in practice correct performance of exercises even nowadays leads to many heated debates. Contribution of this material is the spreading of the system, explanation of its philosophy, seeking its place in the school system. Another system precedes the Paneurhythmy and this is the system of the founder of anthroposophy Rudolf Steiner. His system is called Eurhythmy. Primarily Eurhythmy it declared to be a performance art but later on it is used in education, especially in Waldorf schools and as a movement therapy. The paper is an attempt for a comparative analysis between the two systems.

Keywords: paneurhythmy, anthroposophy, principles of teaching, modern dance, school system

### **Ecaterina PUEHMEYER**

M.S. in Education, Republic of Moldova Former Gymnast and Coach, Sports School of the Olympic Reserve, Moldova Former Artistic Gymnastics Coach, National Sports Council, Malaysia Former Athletic Director, Livingston American School, China Teaching Consultant (Curriculum Gymnastics), PESS, National Institute of Education, Singapore

### Various approaches in increasing students' interest, involvement and creativity during PE classes

The target of physical education program is students' understanding of benefits of regular physical activity and a successful future utilisation of these benefits during adulthood. Learning can be defined as acting on information that has been processed through the individual's senses. A sense-making activity is one of the most important issues in



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the field of education today. Being able to answer such questions as: 'Why do we have to learn this?' and 'How we can use this knowledge in the future?' will provide a meaningful learning motivation and inspiration for the students. When students individually interpret previously learned material, generalize and implement their knowledge in a variety of ways, they all have an equal opportunity to achieve the best of their ability. The following examples of teaching strategies and methods are focused on continual improvement of students' learning: (1) Establishing an environment in which students become more responsible for their learning outcomes. (2) Integrating new technologies. (3) Introducing multidisciplinary projects. Collecting facts, second hand opinions or cut-and-paste thinking have proved ineffective for facilitating creative thinking and learning and we need to replace those with the creative approaches to walk the students into their future! Understanding how to implement various activities that awaken students' curiosity and interest in learning should be the key approach for physical educators today.

**Keywords:** physical education, teaching strategies, meaningful learning, sense-making activities, motivation, creative thinking

### Prof. Carolina POBLETE GÁLVEZ

Department of Sciences of Physical Activity, Sport and Health University Santiago of Chile, Chile

# Ancestral indigenous games and chilena education: Initiative of the Sport Ministry via de National Sports Institute.

The ancestral indigenous games are a part of the cultural diversity and development of human beings and part of our cultural heritage. The addition of this issue to the Forum will widen the view as to what are normal practices and what could be physical education as a way to experience the diversity of physical activity. My investigation It was funded by the University of Santiago. I would also like to recognize the support of the National Institute of Sports in the Valparaíso Region and the regional sport SEREMI. The objective of this presentation is to share the knowledge of ancestral games from the southern cone of America. It is a cultural heritage that our original inhabitants continue being a part of today, especially in the debate about inclusion and contribution to contemporary Chilean education. So we investigated the opinions of people who are the main protagonists of these practices: children, teachers and school principals. their opinions analyzed the qualitative perspective reveal this reality, Of course that is a local reality in which there is a challenge from the way in which revitalizes and enhances a practice like this, but I ask myself, ¿Have we not distanced ourselves from the pleasure and territorial identity of games and physical activities in favor of globalization, trying to copy parameters from other latitudes in order to solve local issues?

Keywords: ancestral games, culture, diversity



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### Assist. Prof. Dr. Stevo POPOVIĆ

Faculty for Sport and Physical Education University of Montenegro, Montenegro

### Identifying the local Spa consumers during off-season in Budvanska Riviera, Montenegro

Authors: S. Popović, D. Bjelica, J. Gardašević, R. Milašinović, & B. Kovačević

Faculty for Sport and Physical Education, University of Montenegro, Montenegro

Montenegro is a widely recognized destination on the Mediterranean touristic map, while Budvanska Riviera is a leading municipality in this small country that offers variety of touristic products and services. Spa is emerging industry that has strong impact on Montenegrin BDP during high and low season; however, off-season is recognized as part of the season with a critical lack of the potential consumers. Hence, this research was aimed at analyzing behavior of local population in Budvanska Riviera, Montenegro toward Spa as well as gaining relevant knowledge about their attitudes toward usage of Spa services during off-season as they might be relevant potential consumers in this part of the season. The sample included 403 randomly selected respondents from mentioned municipality, divided into six subsample groups selected by gender, ages, monthly income, marital status, level of education and profession. The sample of variables contained the system of eight general attitudes which were modeled by seven-point Likert scale. The results of the measuring were analyzed by multivariate analysis (MANOVA) and univariate analysis (ANOVA) as well as Post Hoc test. With regards to subjects' behavior toward spa, it is interesting to highlight that most of subjects recognized their own experience as well as influence of their friends as the strongest factors to use spa, while they mostly use day spa as well as resort and hotel Spa centers to relax and improve their health. However, it is worrying that most of them use spa center ones or less than ones a month. This study also recognized some socio-demographic groups whose attitudes need to be improved.

Keywords: Spa, wellness, fitness, off-season, Budva, Montenegro

**Prof. Dr. Uwe PÜHSE** Department of Sport, Exercise and Health University of Basel, Switzerland

### The DASH-study - disease, activity and schoolchildren's health in Port Elizabeth, SA

Physical inactivity and inappropriate diet have emerged as new leading risk factors for human health, accounting for 10% of the global burden of disease, as expressed in disability-adjusted life years (DALYs). Studies have revealed that the South African population has shifted towards a disease profile similar to that of Western countries, with increasing numbers of deaths attributed to chronic diseases of lifestyle. Additionally, infectious diseases that are intimately connected to poor living conditions and poverty continue to occur in disadvantaged South African schools. The overarching goal of this project is to assess the burden and distribution of communicable diseases and non-communicable chronic conditions among school-aged children in selected schools near Port Elizabeth, South Africa, and to investigate their impact on children's physical fitness and psychosocial health. One specific objective of the study is to design and implement a cluster randomized trial assessing the effect of specific interventions (e.g. physical education, health education, lifestyle interventions and deworming) on improving children's health and wellbeing.

**Keywords:** disease burden, townships, South Africa, physical activity, lifestyle, nutrition, intervention, health education, physical education, deworming



## **INVITED DELEGATES**

#### **Prof. Rose-Marie REPOND**

Bern University of Applied Sciences Federal Institue of Sport, Switzerland

### World – European and National policies- physical education and health – example of Switzerland

This presentation is a review from some of the main documents; recommendations concerning Health enhanced Physical Activity (HEPA) in Europe with the implementation in Switzerland. The Sport in the Agenda of EU and more specialy the DG Education, Youth, Culture and Sport having two priorities: dual carreer and HEPA – Health enchanced Physical Activity. The activities of HEPA Europe are based on WHO policy statements. The WHO Health Behaviour in School-aged Children (HBSC) study (www.euro.who.int/physical-activity) is one of the basis analyses for the presentation. The first deliverable of the Expert Group HEPA Europe, developing the "Recommendations to encourage physical education in schools [...] supports the reflexion. The more difficult part is the implementation using those tools according to the strategy of the government. In Switzerland, health, sport and the promotion of physical activity are among the key challenges. The State emphasizes its support of sport and physical education (WHO, UNESCO, EU deliverable from the HEPA Experts Group, Swiss HSBC, COMPI). Is there a clear consensus and shared understanding among policy makers and practitioners regarding the priorities for physical activities and physical education in term of meeting wider social and educational objectives (UNESCO) as well as health promotion?

Keywords: health, physical activity, physical education, recommendations, implementations, monitoring

### Dr. Ciria Margarita SALAZAR

School of Educational Sciences University of Colima, Mexico

### Physical education teacher's training in Mexico: a public universities study

#### Authors: C. M. Salazar, M. Pérez López & C. Peña Vargas

School of Educational Sciences, University of Colima, Mexico

This non-experimental descriptive mixed study presents a panoramic about Mexican human resources training in the field of Physical Culture; among the specific objectives it seeks to analyze the convergences, training contents and successful experiences. The information unit consisted of 17 curricular from Autonomous Public Universities of various entities of Mexico, affiliated to the Mexican Association of Higher Institutions of Physical Culture (AMISCF A.C.) The technique for the development of this paper was used the documentary and interviews for subsequent the data analysis, a data matrix was used with the purpose to identify the curricular convergences and the interview information and the discourse analysis. Among the key findings that state this document describes the similarities and differences in physical culture professionals' training processes, likewise, the opportunity areas for the universities to display in Mexico unified training processes. It also realizes the resources and strategies used by the operators' educational programs to complete the preparation of human resources that attend the current needs of the profession.

Keywords: teacher training, physical culture and physical education.



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### Prof. Dr. Oscar Yoshihiro S. SANTELICES

College of Human Kinetics University of the Philippines, Philippines

### Initiatives for physical education & promotion of physical activity in the Philippines

### Authors: O. Yoshihiro, S. Santelices, & M. Liza A. Maghanoy

University of the Philippines' College of Human Kinetics, Philippines

The presentation focuses in Research, Practice and Dissemination. It gives a background on health and Physical Education Program on the new K to 12 Educational System. On research, the "Effects of Playground on Selected Anthropometric and Performance Measures of Children: A Post Disaster Study" is presented. Results showed that there is an Increase in weight, waist circumference, hip circumference, grip strength and flexibility in both groups. Children in the area with a playground had significantly 38.5% higher body weight (p = 0.01), 8.8% higher hip circumference (p=0.00) and 74.1% higher grip strength (p = 0.00) than children in the area without any playground facility. It suggested that a playground in a resettlement area may facilitate some improvement in the health-related fitness of children. In terms of practice, a study entitled "Duwa Ta Bohol (Let's Play Bohol): Sport for Disaster" was presented. A Sports relief and community recreation program was delivered to the earthquake survivors. Participants had their choice of clinics on football, basketball, volleyball, ultimate, gymnastics, yoga and Pilates; kids participated in art sessions; everybody danced away with Zumba. The kids to played, moved, and had fun. For the older ones, it built better relationships and get themselves to move again, and to hope again for a better future. In dissemination, the first conference in the country for PE and Sport Science practitioners is shared in the presentation. For the marginalized population of PE teachers, this gathering is a venue for professional development that can empower more than 500 participants.

Keywords: Philippines, PE Initiatives, research, practice, dissemination

### Prof. Dr. Arja SÄÄKSLAHTI

Department of Sport Sciences University of Jyväskylä, Finland

### Creating an effective network to change the national policy for a more physically active childhood

Children need physical activity to ensure their optimal development. Earlier research has shown that a physically active lifestyle begins to track already at the age of three years. For this reason, national policy needs to be changed to encourage the creation of possibilities for children to be physically active from a very early age. In Finland a national network has been established to change the national policy so that it allows Finnish children more physical activity. The process started four years ago with a small group and a mentor from the University of Helsinki, specialized in leadership theories and team building. The group and mentor chose a working strategy called "baby steps". At the beginning, national stakeholders in different fields were identified and invited to a one-day seminar. Based on themes identified by the stakeholders, a series of subgroups were created to work on each specific theme. Changing cultural attitudes and policies takes a long time: it's possible to gain insight within two years, creating an approach requires four years and a change in cultural activities can be seen within ten years. This change can be achieved when people learn to know each other, trust each other and share the same long-term target. Creating such a national network can be seen as one good practice for modifying different cultures.

Keywords: young children, physical activity, national network



### **INVITED DELEGATES**

### **Claude SCHEUER**

Institute for Applied Educational Sciences University of Luxembourg, Luxembourg

# Development and validation of a test instrument for the assessment of basic motor qualifications for diagnose purposes in primary school

#### Author: C. Scheuer\*, A. Bund \*, & C. Herrmann\*\*

\* University of Luxembourg,

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A central aim of Physical Education (PE) is the promotion of basic motor qualifications ("Motorische Basisqualifikationen"; MOBAQ). These are the necessary prerequisites for being able to participate in the culture of movement and thus for developing a physically active lifestyle. For the diagnosis of an eventual need of support of students with a low basic motor qualification level valid assessment tools are necessary. For this purpose, we developed a test instrument for the assessment of basic motor qualifications in third graders. We empirically investigated the construct validity of this MOBAQ test instrument in a study (N = 488, girls: 50.4%, boys: 49.6%; age = 8.8 years, SD = .51). The exploratory factor analysis shows a four factorial structure in the domains "locomotion", "object control", "to move in water" and "to move on a device", which is confirmed in a confirmatory factor analysis (CFI = .998; TLI = .998; RMSEA = .009; WRMR = .638). The developed MOBAQ test instrument is sufficient for test-theoretical requirements and is thus suitable for the assessment of basic motor qualifications for pedagogical diagnosis and monitoring purposes.

Keywords: physical education, basic motor qualifications, test development, factor analysis, pedagogical diagnosis

### Assoc. Prof. Dr. Gurmeet SINGH

Former Chairman and Director Sports Department of Physical Education Panjab University, India

#### Multilateral approach to training technique for young athletes

Children involved in sports should be encouraged to do cross training type of training methods or various different physical activities to develop different game sense and physical skills. Early specialization has some distinct advantages, but may have negative physical, psychological, and social effects on a child. For mastery or Specialization, you have to do many repetitions of high intensity training, which leads to increased risk of injury among young athletes. A youth sport has seen a rapid increase in its athletes specializing in one sport. While sports specialization we should be cautious about intense specialization in one sport before and during adolescence. Research indicates that during the periods of optimum physical development a child's body is developing the right enzymes and hormones, for example those that maximize the development of a particular aspect of physiological performance. It is argued that if speed is not trained during the appropriate skill windows then the child will never, as an adult, be able to run as fast as they could. A 25-year-old may run 10.5 sec for the 100m – this is a good near top international time. This performance may be a response to the appropriate training and the 'right genes' – nature. Think about it like this ... soccer is great for developing foot-eye coordination, basketball is great for hand-eye coordination, lateral agility and movement, etc gymnastics are great for learning tumbling, body and spatial awareness, etc The more sports and unique environments if we can expose to young athletes, the better off I think they'll be. Last but definitely not least, I think the most important thing I can do for young athletes is to make things fun and enjoyable.

Keywords: early and late specialization, Intense training, cross training, multilateral approach



for Physical Education Pedagogy

## **INVITED DELEGATES**

### Assist. Prof. Dr. Brojo SUSILO

Vice Rector for Plaining and Cooperation Affair Staff Executive Board Member ACESS Doctor of Education Faculty of Sports Science Universitas Negeri Jakarta, Indonesia

### Physical education as a tool to Improve the movement of children in primary school

In the development of this present time there have been major changes in civilization with the influence of rapidly evolving technology to take part in a child's life. In this process, not all technological developments there is a positive influence. The fact this is happening now there is a major change to the children lives, playing with the pressure of the speed of technological progress. The existence of traditional games has been replaced by a new game that is very interesting is the game advanced and easy-paced technological developments that make children less physically active. So in the end, a lot of physical problems that arise for children. This issue has become a major obstacle to optimal growth for children, especially children who developments motion causes motion activity becomes less as overweight and obese there have been problem in the world. Physical education is an alternative solution to the problem that occurred. Physical Education as a basis to stimulate child development movement, motivate and accommodate the needs of children's motor movements.

Keywords: physical education, movement, primary school

### Assoc. Prof. Dr. Cevdet TINAZCI

School of Physical Education and Sports Near East University, North Cyprus

# Assessment of physical fitness levels, gender and age differences of rural and urban elementary school children

Physical fitness and activity are both important health and skill-related parameters. Reference data from a population is important for the comparison of children after rehabilitation for injuries or for talent identification. The aim of this study was to reveal the physical fitness levels and gender differences of rural and urban children. The survey also aimed to obtain reference data on physical performance in Turkish Cypriot children. To reveal the differences in the physical fitness of children living in urban and rural districts of Turkish Cypriot population, 7414 male and female elementary school children aged 9-11 years from 90 schools in the Turkish part of Cyprus were tested. Testing procedures were similar to the Eurofit tests. The Eurofit tests included 7 motor and cardiovascular (aerobic) tests. The subjects underwent motor and cardiovascular health-related (aerobic) fitness assessments. In addition, height, body mass index and sum of skinfold thicknesses were higher in the urban children (p<0.05). Performance increased with age both for males and females and BMI increased with age with only small differences between genders. Differences in cardiopulmonary and motor fitness were also found between groups (p<0.05). In addition, jumping abilities and muscle endurance were significantly higher in rural children (p<0.05). The results of this study suggest that children living in the urban region have lower flexibility, muscle endurance and strength level than those who live in the rural region.

Keywords: physical fitness, motor activity, urbanization, rural health



### **INVITED DELEGATES**

### Assoc. Prof. Dr. Ricardo Ricci UVINHA

Chair of Brazilian Association for Leisure Studies Graduate Program in Physical Activity Sciences University of Sao Paulo, Brazil

### Physical education and health in Brazil

It is presented a brief history of the actions lately implemented in Brazil, which have shown the way for the Physical Education in the basic education. It is highlighted the current state of educational policies related to Physical Education defined by the Ministry of Education, as well as its publication in different states and cities in the country. Furthermore, it is emphasized some actions within public health policies that discuss the practice of physical activities as a strategy of people's health care. Descriptions and analysis will comprehend: reformulations proposed by the Ministry of Education classes in the curricula of Brazilian basic education; programs to encourage introduction and training in sports that are promoted by the Ministry of Sports, the initiatives proposed by Ministry of Health and the regional initiatives promoting health and physical activity.

Keywords: physical education, school, pedagogy, physical activity, sports, health,

**Dr. Jana VAŠÍČKOVÁ** Faculty of Physical Culture Palacký University in Olomouc, Czech Republic

### The class moves: How to promote active lifestyle in children and youth

The purpose of this contribution is to present a successful faculty project that was implemented at 47 Czech schools during a 10-month period. The aim of the project was to expand and enrich the spectrum of methods and forms of health education and to motivate elementary and secondary schools to promote the principles of healthy lifestyle. The main activity of the project was to develop a new program for students, which was based on two foreign interventions (Active Healthy Kids; The Class Moves). These programmes were assessed by an expert body as effective in terms of changing attitudes and behaviour in favour of a healthy lifestyle. The programme is tailored to Czech cultural and historical environment and fully in line with strategic document "Health 21" and the newly adopted document "Health 2020". One part of the project was to educate pedagogical staff at special training seminars in order to effectively implement a programme aimed to promote pupils' healthy lifestyle. Then, our personnel visited each school for a day programme and led interactive activities in order to attract pupils and promote healthy nutrition, physical activity, safe and active transport to and from school. Participating schools received newly prepared educational materials (posters) and aids, tools and equipment into gymnasiums (balls, ropes, etc.). At the end of the project duration we organised the national conference to summarise and evaluate the programme and to share knowledge with all participants.

Keywords: physical education, intervention, PE teachers, nutrition, physical activity, sport days, programme



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## **INVITED DELEGATES**

### Prof. Dr. Xiaozan WANG

Dean & Professor College of Physical Education and Health East China Normal University, China

### Youth health promotion: The experience from China

Physical activity level and physical fitness continuously is going to decline among Chinese students, becoming the major issues facing youth in China. School-based action plan for youth health promotion have been designed and implemented to 1) build the framework construction of youth health promotion of China; 2) develop new high quality physical education (PE) curriculum; 3) design extracurricular activities programs to inspire and motivate students to participate in; 4) develop the "Parent-Child Activity", create positive environment to exercise. In order to achieve these goals, three studies totally are included in the project: 1) develop new PE curriculum to improve the quality of PE: "KDL" (Know it, Do it, Love it) PE curriculum, develop MOOC (Massive Open Online Courses) "Physical Education and Health" to provide basic theory of physical education and resources in teaching, and implement "foreign teacher program" to coach sport team in elementary and middle school. 2) Design extracurricular activities programs, increase the level of physical activity: The seven core ideas (universal access, age appropriate, dosage & duration, fun, incentives & motivation, feedback to kids, teach/coach/mentor) are developed to guild and guarantee students have "an hour of exercise every day". 3) Create the cooperation between family and school-based positive environment: students and their parent are invited to the "Parent-Child Activity" once a weekend (120 minutes) to improve the relationship between them, and promote the cooperation between family, school, and community. Youth health promotion is trying to promote every student to become physically active all life.

Keywords: health promotion, physical activity, physical education, health

### Dr. Jingzhen Ginger YANG

Associate Professor of Pediatrics and Epidemiology Nationwide Children's Hospital The Ohio State University, USA

### Psychological health and sports injury

Though sport and recreational activities are widely promoted as part of a healthy lifestyle, the high incidence of sport injuries could diminish the physical and psychological benefits gained from participating in sport activities. Previous research suggests that sport-related injury can have a tremendous impact on sport participants' psychological status, including depression and anxiety. Poor psychological recovery may play a large role in the risk for re-injury. This presentation will discuss the findings from an interdisciplinary collaborative, multi-site study on sports injury and psychological recovery conducted among a cohort of male and female collegiate athletes who attend three Big Ten Conference universities and participate in nine National Collegiate Athletic Association (NCAA) sponsored Division I sports. The results showed that athletes with preseason anxiety had a significantly higher injury incidence rate compared to athletes without anxiety, adjusting for other covariates, and this was observed for both males and females. Male athletes who experienced symptoms of depression at preseason had significantly increased injury risk. However, this trend was not observed among female athletes. Injured athletes were more likely to report postinjury psychological symptoms, and that social support from athletic trainers during injury recovery was helpful in reducing depression and anxiety measured at an injured athlete's returned to play. With the advancement of medical care, injured athletes may be physically healed and return to play but not fully recovered psychologically. Thus, understanding the frequency, rate, severity, and psychological impact of sports injuries is an important first step to prevent and rehabilitate these injuries.

Keywords: sports injury, depression, anxiety, psychological health



### **INVITED DELEGATES**

#### Prof. Dr. Selda BEREKET YÜCEL

Department of Training Education and Kinesiology Faculty of Sports Sciences Marmara University, Turkey

# Effects of sedentary life style, gymnastics and team sports training on anthropometrics parameters, visual selective attention and coincidence anticipation time of 7-9 years old boys

### Authors: S. Bereket Yücel, O. Erkut, A.D. Duru, & S. Bozkurt

Marmara University, School of Physical Education and Sports, Turkey

It is important to become familiar with the child's visual perceptual abilities and understand the impact of perception on movement skill learning and refinement at early age of child development. That's why the aim of this study is to investigate effects of sedentary life style, gymnastics and team sports training on anthropometrics parameters, visual selective attention (VA) and coincidence anticipation time (AT) of 7-9 years old boys. A total of 60 male primary school students (7,81±0,78 years old, 127,19±0,72cm, 26,48±6,35kg) who have attended to Sports Programmes of Marmara University were recruited as the study sample. The participants in football and basketball programmes (n=20, 8,15±0,74 years) were assign into team sports group (TS) and gymnasts (n=20, 8,00±0,76 years) were take place in gymnastic group (GYM). Students in both groups have trained 2 times a week for at least 6 months. The sedentary (SG) control group (n=20,7,32±0,58 years) were randomly selected from healthy male students in similar age from Sehit Günver Primary School in Beykoz/İstanbul. Upon arrival to the Laboratory, all forms were filled out, informed consent singed and anthropometric measurements were taken. The mental vitality and flexibility is being measured by computerized Stroop test (de Fockert 2001). Coincidence anticipation timing accuracy of participants was tested by the Bassin Anticipation Timer Device (Akpınar, Devrilmez, & Kirazcı, 2012). The one-way ANOVA for the fat percentage in the three groups of athletes and sedenters showed a significant main effect in fat percent for four extremities (p=0,02). Tukey Post Hoc comparisons shows that sedenter groups's all anthropometric parameters are significantly higher than that of gymnast and boys in the team sports (p<0,05). The results also indicated that mean of the anticipation time at 3mph scores significantly higher than that of in team sports and sedenters. Furthermore, statistical analysis for VA results in three different groups of participants indicates no significant main effects (p>0,05). As a conclusion, there is evidence for beneficial effects of physical activity and disadvantageous effects of a sedentary lifestyle on the overall anthropometric of children and moderate velocity coincidence anticipation time.

Keywords: inactive life style, visual attention, anticipation time, body fat percent

#### Prof. Dr. Erika ZEMKOVÁ

Faculty of Physical Education and Sports Comenius University in Bratislava, Slovakia

#### Continental differences in application of new technologies in training and testing of young athletes

Fitness testing is a common part of the curriculum in many schools. Testing programs evaluating physical fitness of school-age children vary across regions, countries and continents. For instance, the Eurofit Physical Fitness Test Battery covering tests of flexibility, speed, endurance and strength has been used in many European schools since

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1988. Another example is the Youth Fitness Test that has been used in USA since 1966. Recently, however, this test battery got a makeover and is focused primarily on assessing health versus athleticism of youth. Also most of the current exercise programs are about healthy kids and lifelong physical activity rather than improvement of athletic performance. As an excellent example is a HOPSports Coordinated School Health Program that uses modern technologies attractive for young population with aim to help them become more physically active. Therefore, to move from traditional field tests to more sophisticated testing methods evaluating not only their athletic performance but also health-related fitness should be a crucial step forward. However, so far quite simple equipment has been used to assess physical fitness of school-age children in spite of the fact that a wide variety of computerized portable diagnostic systems are available on the market. Therefore, there is a pressing need to update the test battery that will allow objective measurements of basic abilities and skills using new technologies and computational techniques in analysing data that can be compared over long-term period. This novel approach can help bridge the continental differences in testing and training of young population.

Keywords: technology, young athletes

Assoc .Dr. Ke ZHOU College of Physical Education Henan University, China

# A contribution to the revalidation of the physical activity enjoyment scale (PACES) in a Chinese sample

Enjoyment was considered one of the most important reasons for college students to get involved in physical activities. To provide a better instrument to measure enjoyment of PA, Kendziersky and De carlo (1991) designed the Physical Activity Enjoyment Scale (PACES) with satisfying internal consistency and reliability and found the unidimensional structure of the PACES. The purpose of this work is to examine reliability and validity in a sample of Chinese college students. Participants (N=655 321 girls and 334 boys) were enrolled from different departments of a university located in a central region of China. The purpose of the study was explained to students to obtain permission to conduct the investigation. The PACES was distributed to freshmen and sophomores in the PE. class. The PACES was translated and adapted to the Chinese population by using the back translation technique. The Chinese version PACES consisted of 18 items using bipolar statements (e.g., I feel bored -I feel interested) with a 5-point Likert scale. Both positive and negative items were used in the scale and negative items were reversely coded so that a higher score represented higher enjoyment. The Cronbach's alpha for the Chinese version of PACES was .91, indicating good internal consistency. Three models were analyzed by AMOS. The CFA indicated that Model 1, representing unidimensional structure, provided the best fit to the date (i.e., CFI=.89, GFI=.91, AGFI =.93, and RSMEA=.053). The Chinese version of the Physical Activity Enjoyment Scale is sufficiently reliable and valid to be used for Chinese college students. The finding supported the unidimensional structure of PACES.

Keywords: PACES, revalidation, Chinese, unidimensional structure



### **FUTURE LEADERS/VOLUNTEERS (FLV)**

### Manolis ADAMAKIS

Laboratory of Sport Pedagogy and Didactics of Physical Education Faculty of Physical Education and Sport Science National and Kapodistrian University of Athens, Greece

# Validity of consumer-based physical activity monitors and smartphone applications in adolescent athletes

Physical activity (PA) monitors, which capture activity patterns, require a balance between precision, feasibility and low-cost technologies. The purpose of this study was to examine the validity of total energy expenditure (EE) estimates from a variety of consumer-based PA monitors and smartphone applications (apps). Twenty-one (15.90±2.05 years) healthy boys (n=10) and girls (n=11), with an average BMI=21.45 (SD=4.30), wore three activity monitors and three Android smartphones, each one running a freeware PA app simultaneously. They completed a three-phase protocol, including 5-min reclining, walking and running 1.220 meters at a comfortable pace. The monitors were Sensewear Armband (SA), Garmin Vivofit (GV), Medisana Vifit (MV), and the selected apps were Walk Pedometer (WP), Pedometer 2.0 (P2) and Accupedo (AC). The validity of EE estimates was compared to criterion values obtained from a metabolic system (MedGraphics CPX Ultima). Differences from criterion measures were expressed as mean absolute percent error (MAPE) and were evaluated using repeated measures ANOVA. The results from the RM-ANOVA revealed a significant effect of EE estimates (F=9.26, p<0.001, 2=0.32). The estimates from GV, WP, AC and SA did not differ from the indirect calorimetry estimate (p>0.05), while there was a significant difference for MV (p<0.001) and P2 (p=0.03). For overall group comparisons, the MAPEs were 15.5%, 15.6%, 16.3%, 19.2%, 20.0%, and 23.4% for the AC, SA, WP, P2, GV, and MV, respectively. The indicators of the agreement favored AC, WP and SA, but all devices and apps showed moderate validity in EE estimation. The study demonstrates that existing freeware apps' validity is comparable to consumer-based activity monitors.

**Keywords:** validation, freeware app, android smartphone, software, wearable activity monitor, physical activity, exercise, energy expenditure

### Özgür Yaşar AKYAR

Department of Physical Education and Sport Teacher Education Faculty of Sport Sciences Hacettepe University, Turkey

### Negotiation styles measurement of sports coaches with online self-assessment tool

The intent of this concurrent mixed methods study is to examine negotiation styles of candidate sports coaches by using ENACT negotiation styles online assessment tool. Mixed method approach is chosen in order to better understand usability of ENACT online assessment tool by converging broad numeric trends from quantitative research and the detail of qualitative research. In the study Rahim Organizational Conflict Inventory II and ENACT online assessment tool is used to measure the relationship between integrating, dominating, avoiding, obliging, compromising styles in Conflict Resolution and integrating, dominating, avoiding, obliging, compromising styles in ENACT Negotiation Assessment Tool in order to discuss validation of ENACT assessment tool against RAHIM Conflict Inventory II. Our research presents first steps taken to validate Enact assessment tool against to a validated scale developed



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by Rahim. Enact able to create interactive environment rather than simply asking users to remember their past experiences like in pen and paper psychological tests. The latter solution presents two main advantages:

First it has potential to allow testing users to get more accurate measures because test takers are requested to act, not to remember and also being a game, enact represents a more engaging assessment environment. We see a quick shift from formal education to non-formal and informal learning. Enact has potential to answer this need because of offering innovative form of training by allowing users to get feedback about themselves. However, more data and different analysis should be conducted in order to optain concrete validation and reliability results.

Keywords: negotiation style, sport coaching pedagogy, interpersonal knowledge, social competence

### Prof. Dr. Elena CARRILLO

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In the quest of new ways to promote healthy lifestyles in youth. An exploratory study on the association of social capital and physical activity in a sample of Catalan adolescents from different socioeconomic contexts.

### Authors: E. Carrillo<sup>\*</sup>, & J. Riera<sup>\*\*</sup>

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Social capital, described as the resources that can be accessed thanks to the membership in groups or networks, has been recognized as social determinant of health. However, its effect has been little investigated in relation to obesity and its health related behaviors and in adolescent population. The overall aim of this communication is to report the results of a research on the association of social capital on the physical activity of a sample of Catalan adolescents from different socioeconomic contexts. Results show that the different constructs of social capital act separately and have allowed to characterize some of the several mechanisms through which they influence lifestyle and health behaviors in adolescents. In the framework of this research, higher levels of social capital in the family and peers' domains were associated with better punctuations in physical activity and sedentary behaviors related to the use of technological leisure. Further research should contribute to refine the role of social capital in different domains as a social determinant of physical activity in adolescents and in relation to other determinants of health.

Keywords: social capital, physical activity, adolescents



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### Dr. Dané COETZEE

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# The effect of a three-month Brain Break intervention program on the physical fitness levels of Grade 6-learners

A global problem exists with regards to the decline in children's physical activity levels which lead to the rising trends of obesity amongst children. The aim of this study was to determine whether participation in a three month HOPSports Brain Break intervention program will increase the physical fitness levels of Grade 6-learners. A hundred and twenty Grade 6-learners with a mean age of 11.3 years from two schools in the North West Province formed part of this study. A pre-test-post-test design was followed. The three month HOPSports Brain Break intervention was executed one a day for 10 minute on the experimental group (n=30 boys and n=30 girls). The physical fitness of the participants was determined by means of the EUROFIT test. This test is designed for school-aged children (six to 18 years) assessing various fitness components, cardiovascular endurance, agility, strength, muscular endurance flexibility and speed. After the three month HOPSports Brain Break intervention program was conducted the boys and girls in the experimental group preformed significantly ( $p\leq0.05$ ) and practically ( $d\geq0.3$ ) better than the control group during balance; explosive leg strength; abdominal strength; speed of limb coordination and cardiovascular endurance. Whereas only the boys of the experimental group out preformed the boys of the control group statistically and practically during the speed and agility skills. It can be concluded from the results that a three months HOPSports Brain Break intervention program improved most of the fitness levels of the Grade 6-learners.

Keywords: HOPSports, brain breaks, physical inactivity, physical fitness levels, grade 6-learners

Mesut KARLIK Movement and Training Sciences İstanbul University, Turkey

### Future expectations of adolescent boys attending to high school of sports and general high school

### Authors: M. Karlık \*S. N. Arman\*, E. Çabuk Akyol\*\*, A. C. Chousein \*, & S. İnal \*\*\*

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The aim of the study was to compare the effects of quality of life on future expectations of adolescent attending to high-school of sports and general high-school.109 boys was included to this study.%58,7(64people) of the participants were the students of Sports High-School(group1) which is supporting by Turkish Football Federation.%41,3(45people) of the participants were the students of 11 different general high-schools(group2).Sociodemographic informations were questioned.WHOQOL-Bref with 4 domains(Physical health,Psychological,Social and Environment)was used to determine the quality of life(QoL) and future expectations of participants was questioned by Future Expectation Scale for Adolescents(FESA).The mean of the FESA scores was 5.77±0.63 and 5.6±0.64 in the group1 and group2,



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respectively. There was no statistically difference between results of WHOQOL-Bref and FESA of both groups(p>0.05). Significant relationships were found between three domains of WHOQOL-Bref(Physical health,Psychological and Environment) and scores of FESA(p<0.001) in the group 1. In the group 2, significant relationships were not found between any domain of WHOQOL-Bref and scores of FESA(p>0.05). According to regressional analysis, "Environment" domain of WHOQL-Bref was only predictive factor of future expectations in the group1. Future expectations of the boys attending general high school and high school of sports were high In this study. Having a career plan on sports does not effect the future expectations in the boys attending high school but environment domain of QoL is predictor factor of future expectations in the boys attending high school of sports. Further research is needed to investigate the effects of other factors on future expectations and in the boys attending high school of sports by targeting larger samples.

Keywords: future expectations, quality of life, sports high-school, adolescent, WHOQOL-Bref

### Antonín KUBAŇ

Faculty of Physical Education and Sports, Department of Gymnastics Charles University, Czech Republic

# Creation and verification of effectiveness of our new 'Music-based physical educational (MBPE) program for pre-school children

The aim of our research is to draft and attempt to validate a comprehensive interventional educational program for pre-school children focused on all-round personal development. An additional effect of the executed research should be the support of pre-school child's natural and comprehensive kinetic development, sensorimotor, musical and rhytmical competences with the stress on personal health and hygiene. With pre-test and post-test use of a (our) newly modified test battery, we have witnessed considerable improvements in aesthetical motoric exhibitions, in general in relation to the quality of motoric and musical skills and in feelings towards the music. This was conducted after one school year of our MBPE program. The children aquired new competences from the fields of general knowledge and social communication too. The strengthening and deepening of the interpersonal boundaries and relationships among the children contributed to their orderliness and discipline. By analysing the average change of a child's musical/motor skills before and after the MBPE program intervention the following results can be seen: children 's rhythmic perception improved by 28,9%, time for rhytmic adaptability was reduced by 51,6%, music/motor memory improved by 28,8%, motor memory improved by 44,3%, a child's time coordination was 50,9% faster and the time needed for dynamic balance was reduced by 24,7%. Considering our results, we can ascertain that our MBPE program has a positive influence on, not only a child's musical/motor skills, but also on their acquisition of a wide set of new physical competences, experience, musical competences, social skills. Our MBPE program is focused on kindergartens, but it can be also applied to lower grades of primary school.

**Keywords:** music-based physical education, educational program, pre-school education, all-round personal development, comprehensive kinetic development



### **FUTURE LEADERS/VOLUNTEERS (FLV)**

#### Mona Liza A. MAGHANOY

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### Initiatives for physical education & promotion of physical activity in the Philippines

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The presentation is on initiatives from the University of the Philippines College of Human Kinetics (UP-CHK), as the country's pioneer and leading institution in Physical Education and Sport Science. It focuses on three areas: Research, Practice and Dissemination. The presentation gives a background on the health of the citizens and the Physical Education Program in the Philippines that shall be implemented in the new K to 12 Educational systems. Three initiatives shall be discussed in this presentation in conjunction with three other initiatives discussed in a separate presentation from the Philippines. On research, an exploratory study on the assessment of motor skill development, self-perception and physical activity in children enrolled in sport skill clinic is discussed. The study is a pioneer work in the country in terms of its methodology. A significant difference was found in the motor skills of children in one group however, other differences in measures were not significant. In terms of practice, the benefits of a unique PE course from the Philippines, which uses traditional games, native to the country is presented. The use of Philippine games is highlighted for the ease of use for PE teachers and the enjoyment factor which motivates students to participate and enroll in the class. In Dissemination, the story of the first Conference in the country for PE and Sport Science practitioners is shared in the presentation. For the marginalized population of PE teachers in this country, this gathering is a venue for professional development that can empower the 500 or more participants from the 7107 islands in the Philippines.

Keywords: Philippines, PE initiatives, research, practice, dissemination

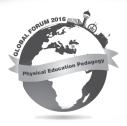
### Zornitza MLADENOVA

Graduate assistant & PhD Student Department of Tourism, Alpinism, Orientation Snow Sports and Sports Animation National Sports Academy "Vassil Levski", Bulgaria

### Sport animation in the educational program of the National Sports Academy "Vassil Levski"

One of the new trends of the development of sport in our global society is sports tourism. The arising of this kind of tourism is one of the new challenges in front of the sport science and especially of the education of new kind of experts – sport animators. The main goal is organizing the leisure thru sport and physical activities. The forms which sport is implemented in tourism are evolving and changing. The demand of this kind of services is still topical but there has been increased interest and demand for new, non-traditional sports and disciplines. Increasingly popular practice became more than a sport or sports activities offered in the package during a vacation. Adaptation and modification of traditional sports in order to make them more accessible and safe from a wide range of tourists are also part of a trend in sports tourism. All this variety of activities and events of the sport require very serious requirements to sports professionals and their profiling. Bulgaria has more than 70 year traditions in the physical education and sport sciences. National Sports Academy educates - instructors, teachers, sport organizers. In 2006 was created First Bachelor degree program "Sport animation". The great advantage of this educational program is that the students acquired all knowledges, skills and competences during the four seasons in the year. The aim of this paper is to highlight some of the key components associated with education and training in sports animation, outdoor activities tourism and the management of sports events.

Keywords: physical education in sport animation, outdoor activities, sports tourism and sports events



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### Tholumusa Favoured MLALAZI

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### Injury prevalence in Zimbabwe's elite female high school hand-ballers

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The purpose of the study was to determine the injury prevalence among elite under-20 female high school handball players in Zimbabwe during a 5-day inter-provincial tournament. This cross sectional study utilized an adapted questionnaire from the Australian Sports Commission. A total of 112 female hand-ballers between 15 and 20 years from 8 provincial teams were assessed. Descriptive statistics of ranges and frequencies was compiled by MS Excel 2010 into tables, graphs and proportional circles. The injury prevalence was 42. Harare province suffered the most injuries (33.3%). The backs encountered the most injuries (28.6%) while the lines had the least. The lower and upper limbs experienced the same relatively high injury frequencies (43%). The hands and fingers sustained the most injuries (26.2%) and the knee was the most affected on the lower extremities. The majority of the injuries (57.1%). The RICER method with (40.5%) was the dominant injury management procedure. An incident rate of 46.9 injuries per 1000 playing hours was established. The injury prevalence for Zimbabwe's elite under- 20 female high school handball players was high although the injuries were not serious. The upper and lower extremities had equal chances of suffering injuries, with the hands and fingers registering the highest frequencies. Backs were more susceptible to injuries, while the line players were less susceptible to injuries. Future studies could focus on injuries during training and in competition and over diverse age groups.

Keywords: handball, injury, incidence rate, RICER

### Dr. Gabriela OLOSOVÁ

United school Novohradská / Gymnasium of Jur Hronec Faculty of Physical Education and Sports Comenius University, Slovakia

### Peer assessment of gymnastics performance in physical education

To ensure quality Physical Education (QPE), teachers must search for new technologies, effective and innovative methods of teaching and evaluation. The aim of the study was to verify students' ability to do a peer assessment of gymnastics performance in PE classes. Ten 11- to 12-year-old female students and a PE teacher participated in the study. After being taught gymnastics for 3 weeks (twice a week for 45 minutes), the participants did a peer assessment of their performance in gymnastics compilation. An observation and an anonymous peer assessment handout was used to collect the data and a percentage calculation was used for data evaluation. As a result in terms of single movements, 100% concordance among the teacher and the students appeared 12 times, 89% concordance appeared 10 times, 78% concordance 7 times, 67% concordance 6 times, 56% concordance 5 times and the concordance <50% appeared 9 times. When evaluating the overall performance of the compilation, 41% of the students agreed with the teacher's evaluation, 10% of the students would give the performers better evaluation than the teacher and almost 50% of the students would give the performers worse evaluation compared to the teacher. In conclusion, students' ability to assess themselves and their peers in gymnastics seems to be fair and pretty good and we can say that they do not take relationships under consideration. This research was supported by a VEGA 1/0429/16 grant "New technologies in Physical and Sport Education and their effects on an affective and a cognitive development of secondary school pupil".

Keywords: peer assessment, physical education, gymnastics



## **FUTURE LEADERS/VOLUNTEERS (FLV)**

### Dr. Biljana POPESKA

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# Manifestation, assessment and development of coordination at Macedonian childen in early school period

Coordination is one of the abilities that define human motor space. It's related with successful realization on many movement tasks especially when learning new motor movements. The aim of this paper is to determine test characteristics of movement tasks applied for estimation of coordination in six and seven years old male children as well as to determine the changes in manifestation of coordination at the same group of children at the age of six years and lately at the age of seven. Coordination was analyzed using four motor tests, applied on a sample of 246 examiners, students in first and second grade in five primary schools in Macedonia, included in initial measurement at the age of six and lately in the final measurement at the age of seven. Using adequate statistics methods we determined tests characteristics: discriminativity, reliability, validity and representativity. T- Test was used to determine the differences in test achievements between two measurements. Obtained results suggest on very good validity and reliability of applied tests and recommendation for future use in PE teaching process. T – test results suggest on statistically significant better results in final measurement in all applied tests. Obtained results suggest on positive development changes and Improvement of coordination at children at early school period. We recommended several models for improvement of coordination in children. One of the models is implementation of Brain Break Videos. This is based on their characteristics such as new, unfamiliar movements, complex coordination, and movement on music and in new environment.

Keywords: motor ability, development, test characteristics, differences, PE contents

### Ryan R. PORTER

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#### Exercise intensity and health related outcomes

While obesity is an epidemic seen in most communities across the world, many other chronic diseases such as cancer, diabetes, and heart disease are also growing in epidemic proportions. It is essential that evidence based interventions be implemented to address such concerns. While seemingly unpopular in many communities, exercise is a holistic intervention that has been demonstrated to affect many of the physiological health outcomes associated with chronic disease. With advances in technology, objectively measured physical activity continues to give us greater insight into the effects exercise and physical activity have on chronic disease. Often time's researchers suggest that greater physical activity intensity may result in more favorable outcomes when discussing physiological outcomes associated with chronic disease. With wearable technology that can provide objective exercise and physical activity intensity measurements, this theory is now easier to address. A recent review concerning physical activity intensity in youth demonstrated that vigorous physical activity was more strongly negatively associated with body composition, and more strongly positively associated with cardiorespiratory fitness compared with moderate physical activity or moderate to vigorous physical activity. They also demonstrated that no specific physical activity intensity appeared too consistently and more strongly associate with cardiometabolic biomarkers. Future research should include longitudinal studies to determine if physical activity intensity in adolescent and youth populations correlates with a decreased risk of chronic disease in adulthood.

Keywords: exercise intensity, chronic disease, exercise prescription, youth



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### Gerry Gunawan SAPUTRA

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### Innovation of sport activators to fulfill the crisis movement (Action research on people who move at Kanal Banjir Timur, East Jakarta)

### Authors: G. Gunawan Saputra & M. Hernawan

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The purpose of this study was to fulfill the crisis movement with the application of innovative models of sports activities by sports activators to the people who move at Kanal Banjir Timur. This research was conducted at Duren Sawit area along the lines of Kanal Banjir Timur. The subject of this research is all the people who move in this location. The research method is using action research with quantitative and qualitative data. The research instrument used to collect data such as: 1) Questionnaire; 2) Observation Records; 3) Field Notes (CL); 4) Interview Notes; and 5) Discussion Notes. The quantitative data in the form of a questionnaire filled out by the public, while the qualitative data from observation results in the form of 15 field notes, 2 interview notes 2 and 3 record discussions. Sport models activities which implemented in the form of anthropometry, recreational sports, sports introduction, kids athletic and fitness test. Then the data can be accounted for validity use through inspection: 1). Observation; 2) Triangulation; and 3). Examination Fellow Friends. Results: 1). A total of 86.78% of the people are enthusiastic and welcomed the implementation of innovative sport models activities; 2) The implementation of the innovative sport models activities by sports activators is effective for the fulfillment of the crisis movement, it can be seen by many people are involved regularly in each activity. This research concluded that the innovation sport models activities by sports activator is effective in the fulfillment of crisis movement for people who move in Kanal Banjir Timur. **Keywords:** innovation, sport models activity, sport activators, crisis movement



### **FUTURE LEADERS/VOLUNTEERS (FLV)**

### Dr. Mariana TUDOR

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# Inclusiveness and quality of life promotion in children through physical activity - a collaborative approach

Health promotion initiatives involve any combination of health, education, economic, political, spiritual and organizational actions, aimed at improving the health of populations. For the quality of life of people with disabilities it is necessary to emphasize those means that can facilitate empowerment in order to overcome interpersonal barriers. Community development refers to the process of building strong, vibrant and healthy communities within a concept of social inclusion for all. Given the constant economic and social changes, the non-formal component of education is increasingly widespread in preparing young people to exercise their role as active and responsible citizens, involved in all aspects of the society in which they live. The University of Pitesti is actively involved in local community's life through the promotion of volunteering and development of programs to include students, according to their conveyed interest, in specific actions in partnership with governmental agencies and NGOs. Statistical analyses showed significant improvements of the specific quality of life indicators for the intervention groups. Quantitative analysis demonstrated a significant decrease mainly in stress indicators. Qualitative analysis identified some triggers (sense of purpose, relationships and perceived health) of volunteering which influenced these improvements Voluntary service is a form of social participation, educational experience and a factor of employment and social integration, and thus it justifies the expectations of young people and society alike on improving the quality of life through different pathways.

Keywords: inclusiveness, quality of life, physical activity, collaborative approach



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### Gamification of education

Gamification is about much more than simply rewarding points and badges, but rather understanding and influencing the human behaviors companies want to encourage among their employees and customers. Gamification is founded in the fundamentals of human psychology and behavioral science, and rests on three primary factors: motivation, ability level and triggers. "Gamification is the use of game play mechanics for non-game applications, particularly consumer-oriented web and mobile sites, in order to encourage people to adopt the applications. It also strives to encourage users to engage in desired behaviors in connection with the applications. The technique can encourage people to perform chores that they ordinarily consider boring, such as completing surveys, shopping, or reading websites. A well-designed gamification system can help players take on meaningful roles that are fruitful for learning. By making the development of a new identity playful, and by rewarding it appropriately, we can help students think differently about their potential in school and what school might mean for them. As gamification spreads throughout the real world, there is little question it will also impact our schools. By leading with research-based, theory-driven gamification projects, we can work to ensure that the impact of gamification is a positive one. Gamification will be a part of students' lives for years to come. If we can harness the energy, motivation and sheer potential of their game-play and direct it toward learning, we can give students the tools to become high scorers and winners in real life. **Keywords:** game, gamification, gamification of education

### Karolina CHLEBOSZ

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### Sport psychology in teaching and learning environment

Teachers can apply lessons from sport psychology to increase motivation and excitement in the classroom. Theoretical approaches used in sport psychology are relevant to any area in which performance is crucial. Musicians, actors or students enrolled in a class - all experience the same group dynamics and issues as athletes striving for optimal performance. The motivational techniques advocated by sport psychologists also help to achieve principles of good practice developed by Chickering and Gamson to enhance classroom instruction. There are three categories of techniques (Bronze, Silver, and Gold) that encourage active learning based on concepts and theories adapted from sport psychology. The level of difficulty and risk in applying these active learning strategies in the classroom increases with each category. Many of the basic sport psychology findings relating to athlete-coach dyads can easily extend to student-teacher relationships. Whereas the goal of the athlete-coach partnership is to enhance athletic performance, the goal of the student-teacher partnership is to enhance academic performance. Classes can be more dynamic and active, and have a more enthusiastic atmosphere when teachers use concepts of sport psychology in their teaching. Taking risks in order to teach more effectively is well worth the benefit.

**Keywords:** Sport psychology, teachers, classroom, students, goal setting, motivation, time management, team, competitions, stress management, group projects

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