



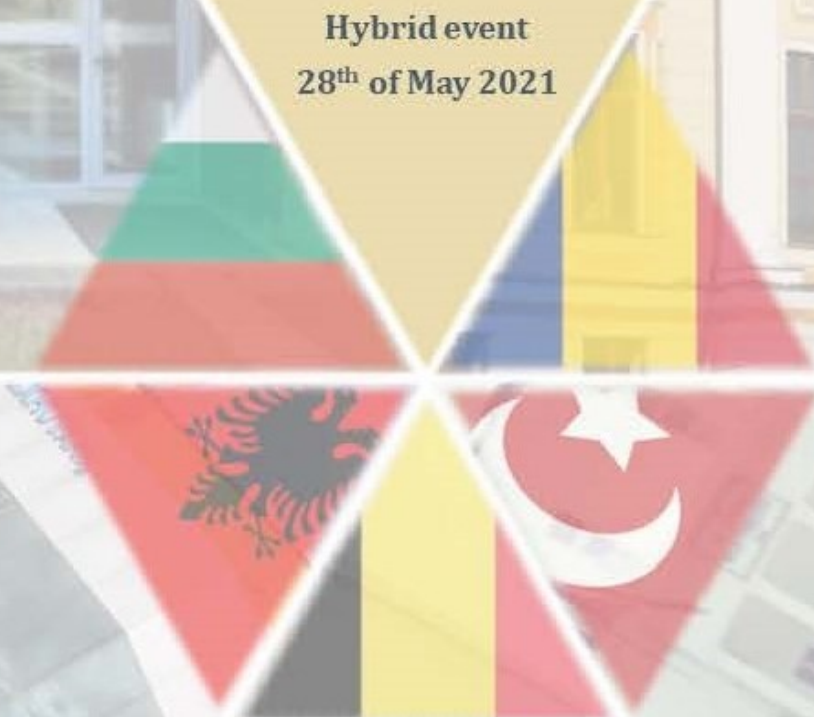
„1 Decembrie 1918” University of Alba Iulia  
Research Center for Physical Education,  
Sport & Kinesiotherapy



**BOOK OF ABSTRACTS**

**International Student Conference**  
**SPORT ACTIVITIES & REHABILITATION**  
**IN**  
**CONTEMPORARY SOCIETIES**

**Hybrid event**  
**28<sup>th</sup> of May 2021**



EDITORS

**ANGEL-ALEXHĂISAN**

**STEFANIYA BELOMAZHEVA-  
DIMITROVA**

**PETRONELA-LĂCRĂMIOARA  
HĂISAN**

**SVETOSLAV STEFANOV**

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**International Student Conference**

**SPORT ACTIVITIES & REHABILITATION**

**IN**

**CONTEMPORARY SOCIETIES**

The abstracts hereby included, authored by the following: ȘTEFAN Moroșanu, VLAD TEODOR Grosu, MIHNEA-GABRIEL Cozma, PAUL-ALEXANDRU Pătruțiu, ANDREEA-IONELA Țetcu, MARIA-MIRABELA Zsido, IOANA-CĂTĂLINA Cifrea, CORINA-DORINA David, MARIUS-IULIAN Drăgan, MARIA-COSMINA Ghioanca, OFELIA-ELENA Păsărea, EUGENIA Procopii, represent a translation, with additions, from Romanian into English of the abstracts included in the full-text volume of Proceedings of the student conference titled "Trenduri si Realități Contemporane in Activitățile Fizice si de Recuperare", published by Aeternitas Publishing House (ISBN 978-606-613-213-8) and are reproduced with the permission of the authors and the publishing house.

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„1 DECEMBRIE 1918” UNIVERSITY  
OF ALBA IULIA

Research Center for Physical Education, Sport & Kinesiotherapy

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### **International Student Conference SPORT ACTIVITIES & REHABILITATION IN CONTEMPORARY SOCIETIES**

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**Virtual venue: Zoom platform**

**Official opening 10:00 AM, 28 May 2021**

**Editors:**

**ANGEL-ALEX HĂISAN  
PETRONELA-LĂCRĂMIOARA HĂISAN  
STEFANIYA BELOMAZHEVA-DIMITROVA  
SVETOSLAV STEFANOV**

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## **SCIENTIFIC COMMITTEES**

### **Physical education & sport panel**

**EMILIA FLORINA Grosu**, Professor, "Babeş-Bolyai" University of Cluj-Napoca, Romania

**ALEXANDRU Mureşan**, Professor, "Babeş-Bolyai" University of Cluj-Napoca, Romania

**STEFANOV Svetoslav**, Assoc. Prof., "St. Cyril and St. Methodius" University of Veliko Tarnovo, Bulgaria

**SABINE Goeminne** – Lecturer, VIVES University College, Belgium

**CRISTINA MARIA Man**, Lecturer, "1 Decembrie 1918" University of Alba Iulia, Romania

**EDMOND Biçoku**, PhD, "Aleksandër Xhuvani" University of Elbasan, Albania

**DANIELA Pandulcheva**, PhD, "St. Cyril and St. Methodius" University of Veliko Tarnovo, Bulgaria

### **Kinesiotherapy panel**

**NIKOLAOS Mavritsakis**, Assoc. Prof., "1 Decembrie 1918" University of Alba Iulia, Romania

**STEFANIYA Belomazheva-Dimitrova**, Assoc. Prof., "St. Cyril and St. Methodius" University of Veliko Tarnovo, Bulgaria

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**NICOLA Mancini**, Dr. - University of Foggia, Italy

**NICOLE Maoussier**, Docente, - University of Rome "Foro Italico", Italy





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**ANGEL-ALEX Hăisan**, Lecturer, "1 Decembrie 1918" University of Alba Iulia, Romania

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**GRIGORE DAN Iordachescu**, Lecturer, "1 Decembrie 1918" University of Alba Iulia, Romania

**IULIA GABRIELA Onac**, Vice-President of the Maria Beatrice Association of Alba Iulia

**VLAD TEODOR Grosu**, Lecturer, Technical University of Cluj-Napoca, Romania

**CARMEN ANETA Preja**, Lecturer, North University of Baia Mare, Romania

**IULIAN ȘTEFAN Holubiac**, Assist. Prof., "Stefan cel Mare" University of Suceava, Romania

**DANCHO Pandulchev**, PhD, "St. Cyril and St. Methodius" University of Veliko Tarnovo, Bulgaria

**MILEN Vidinovski**, Senior Lecturer, "St. Cyril and St. Methodius" University of Veliko Tarnovo, Bulgaria



## **PROGRAM**

**10:00 – 10:10**

**welcoming speech on behalf of the organizing committee**

**ANGEL-ALEX Hăisan**

Director of the Research Center for Physical Education, Sport & Kinesiotherapy  
„1 Decembrie 1918” University of Alba Iulia, Romania

### **PHYSICAL EDUCATION & SPORT PANEL**

**10:15 – 10:30**

**Keynote speaker**

**CRISTINA MARIA Man**

Lecturer, „1 Decembrie 1918” University of Alba Iulia, Romania  
Design of performance training during pandemic times

**CHAIRWOMAN**

**ADELA Neamțu-Popescu**

Assist. Prof., „1 Decembrie 1918” University of Alba Iulia, Romania

**10:30 – 10:40**

**MARIELA Nikolaeva Nikolova**

Development of university sports  
during pandemic times  
“St. Cyril and St. Methodius” University  
of Veliko Tarnovo, Bulgaria

**10:40 – 10:50**

**XHESJANO Bani**

Critical phases of coordination  
development and relationship with  
motor learning – a review  
“Aleksandër Xhuvani” University of  
Elbasan, Albania

**10:50 – 11:00**

**HATICE MIRAY Al**

Participation of girls in sports - a study  
in the context of the socioecological  
approach  
Ege University of Izmir, Turkey

**11:00 – 11:10**

**ȘTEFAN Moroșanu & VLAD TEODOR  
Grosu**

Improving motor skills and physical  
capabilities through yoga  
“Babes-Bolyai” University of Cluj-  
Napoca, Romania  
Technical University of Cluj-Napoca,  
Romania

**11:10 – 11:20**

**MIHNEA-GABRIEL Cozma**

Technology in contemporary volleyball  
„1 Decembrie 1918” University of Alba  
Iulia, Romania

**11:20 – 11:30**

**PAUL-ALEXANDRU Pătruțiu**

Childhood games and their relevance in  
contemporary society

## **Book of abstracts**

*International Student Conference*

*Sport Activities & Rehabilitation in Contemporary Societies*

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*„1 Decembrie 1918” University of Alba Iulia, Romania*

**11:30 – 11:40**

**ANDREEA-IONELA** Țetcu

*Influence of the environment on the opinion regarding the practice of physical activities*

*„1 Decembrie 1918” University of Alba*

*Iulia, Romania*

**11:40 – 11:50**

**MARIA-MIRABELA** Zsido

*Psychological training of handball referees*

*„1 Decembrie 1918” University of Alba Iulia, Romania*

**11:50 – 12:10**

**Workshop Maria Beatrice Center**

**Occupational Therapist VERONICA** Roșu & **Kinesiotherapist ALINA** Florea

*Cerebral palsy – trunk control & improvement of posture*

**KINESIOTHERAPY PANEL**

**12:15 – 12:30**

**Keynote speaker**

**SABINE** Goeminne

*Lecturer, VIVES University College, Belgium*

*Start to swim: a new learning line in swimming education in Flanders, Belgium*

**CHAIRWOMAN**

**PETRONELA LĂCRĂMIOARA** Hăisan

*Assist. Prof., „1 Decembrie 1918” University of Alba Iulia, Romania*

**12:30 – 12:40**

**IOANA-CĂTĂLINA** Cifrea

*The schoolbag, factor of influence in pupil's life*

*„1 Decembrie 1918” University of Alba Iulia, Romania*

**12:40 – 12:50**

**CORINA-DORINA** David

*The need of kinesiotherapists in Romanian schools*

*„1 Decembrie 1918” University of Alba Iulia, Romania*

**12:50 – 13:00**

**MARIUS-IULIAN** Drăgan

*Recovery of joint ankle stiffness, secondary to malleolar fractures*

*„1 Decembrie 1918” University of Alba Iulia, Romania*

**13:00 – 13:10**

**MARIA-COSMINA** Ghioanca

*The impact of intermittent fasting on the body*

*„1 Decembrie 1918” University of Alba Iulia, Romania*

**Editors**

*Angel-Alex Hăisan, Petronela-Lăcrămioara Hăisan,  
Stefaniya Belomazheva-Dimitrova, Svetoslav Stefanov*

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**13:10 – 13:20**

**OFELIA-ELENA** Păsărea

*The importance of kinesiotherapy and  
massage in circulatory diseases*

*„1 Decembrie 1918” University of Alba  
Iulia, Romania*

**13:20 – 13:30**

**EUGENIA** Procopii

*Postural deficiencies of persons  
employed in multinational companies*

*„1 Decembrie 1918” University of Alba  
Iulia, Romania*

**13:30 – 13:40**

**closing speech**

**ANGEL-ALEX** Hăisan

*Director of the Research Center for Physical Education, Sport & Kinesiotherapy  
„1 Decembrie 1918” University of Alba Iulia, Romania*



## **EDITORS**

**Angel-Alex Hăisan** (born in Piatra-Neamț, Romania, April 1983) is since 2016 a lecturer at the Department of Physical Education and Sport, from the Faculty of Law and Social Sciences of the “1 Decembrie 1918” University of Alba Iulia, Romania, where beside his didactic attributions, which include courses like “Scientific research methods”, “Motor and somatofunctional assessment”, “Fitness”, “Methodology of teaching volleyball in school”, “History of physical education” or “Corporal expression and eurythmy”, he is the Director of the Research Center for Physical Education, Sport & Kinesiotherapy and the Erasmus+ departmental coordinator.

*He received his multidisciplinary education at the Babes-Bolyai University of Cluj-Napoca, Romania, studying, at Ph.D. level Sport Sciences (2019-present) and Sociology (2008-2013), at master level Management of Sport Structures and Activities (2007-2008) and at bachelor level Business Administration (2002-2008) and Physical Education and Sport (2003-2007).*

*His past work experience is closely related to the domain of physical education and sports, being an ex-professional volleyball player (LPS Piatra Neamț, 2002-2003), secretary of the Palestra Center (Babes-Bolyai University of Cluj-Napoca, Romania, 2007–2009) and a fitness instructor at the Faculty of Economics and Business Administration (Babes-Bolyai University of Cluj-Napoca, Romania, 2008 – present), but in the same time to the research one, as a postdoctoral fellow (Institute of National Economy, Romanian Academy, 2014-2015).*

*His international experience began with the participation to the European Cups (2002), as a professional volleyball player and with a Work & Travel experience in the United States of America (2005) and an Erasmus study grant at the Faculty of Communication Science (University of Teramo, Italy, 2006-2007), as a student and it continue to develop, as an invited researcher, at the Department of Communication and Social Research of the Sapienza University of Rome (2015) and as a professor, with an Erasmus training grant in Kazakhstan (2019) and four Erasmus teaching grants in Russia (2017), China (2018), Spain (2018) and Bulgaria (2021).*

*Author of two books, published at the Cluj University Press (2013 & 2016) and numerous interdisciplinary studies, with yearly participations in institutional development grants, since 2017 he oversees organization of the department's yearly conference and is the editor of the Proceedings.*



**Petronela-Lăcrămioara Hăisan** (born in Piatra-Neamț, Romania, June 1984) is since 2019 an assistant professor at the Department of Physical Education and Sport, from the Faculty of Law and Social Sciences of the “1 Decembrie 1918” University of Alba Iulia, Romania, where she is responsible for the seminars and practical courses of the kinesiotherapy and special motricity students for the following courses: “Functional Anatomy”, “Patient handling techniques”, “Kinesiotherapy for Neurological Disorders”, “Secondary and Tertiary Kinesiotherapy”, “Neuromotor Rehabilitation: Methods and Techniques”, “Pediatric Kinesiotherapy”.

Her educational background includes an ongoing Ph.D. in Sport Sciences (Babes-Bolyai University of Cluj-Napoca, Romania), a master's in Physical Therapy and Special Motricity (Babes-Bolyai University of Cluj-Napoca, Romania, 2011) and two bachelor's degrees, one in Kinesiotherapy and special Motricity (Babes-Bolyai University of Cluj-Napoca, Romania, 2009) and another one in Technical Dentistry (Iuliu Hatieganu University of Medicine and Pharmacy Cluj-Napoca, Romania, 2006).

Member of the Romanian Balneology Association, with past collaborations with the Romanian Society for Cancer (2011-2012), she's working as a kinesiotherapist since 2011 (“Sf. Iosif” Medical Center, Cluj-Napoca, Romania), focusing particularly on improving autonomy, well-being, and quality of life of people suffering from different neurological disorders especially Parkinson disease and implementation of novelty technologies in the physical recovery process.

Authoress of several interdisciplinary studies, since 2019 she is involved in the organization of the department's yearly conference and is the editor of the Proceedings.

**Stefaniya Belomazheva-Dimitrova** (born in Kyustendil, Bulgaria, July 1980) is an associate professor since 2016 at the Department of Theory and Methodology of Physical Education, Faculty of Education, "St. Cyril and St. Methodius" University of Veliko Tarnovo, Bulgaria, where she teaches courses like "Kinesiotherapy", "Adapted physical activity", "Classical massage", "Medico-biological problems at sport", "Kinesiology" and she is the Erasmus+ departmental coordinator.

Her educational background includes an Ph.D. in Physical Education and Sport, (St. Cyril and St. Methodius" University of Veliko Tarnovo, Bulgaria 2014), a master's degree in Sports Kinesiotherapy (National Sports Academy – Sofia, Bulgaria, 2004) and a bachelor's degree in Kinesiotherapy (National Sports Academy – Sofia, Bulgaria, 2002).

Her work experience is closely related to the domain of kinesiotherapy being a kinesiotherapist at the Center for Children with Disability from 7 to 18 years-old (2009-2010) and at Center for Children with Disability up to 7 years-old (2011). In the past she was a national competitor in ski orienteering and orienteering and in present times she is a coach for the student teams of athletics and orienteering at "St. Cyril and St. Methodius" University of Veliko Tarnovo

In the last ten years she has benefited of numerous Erasmus teaching grants in Romania, Belgium, Spain, Latvia, Lithuania, Albania, Poland and Finland and she is a participant in three Erasmus intensive weeks in the field of Physiotherapy, one in Bulgaria and two in Finland.

During her academic work she has published more than 40 scientific publications, one monography, one book and three university textbooks.

**Svetoslav Stefanov** (born in Veliko Tarnovo, Bulgaria, February 1972) is an associate professor since 2013 at the Department of Theory and Methodology of Physical Education, Faculty of Education, "St. Cyril and St. Methodius" University of Veliko Tarnovo, Bulgaria, where he teaches courses like "Volleyball", "Methodology of volleyball", "Winter sports", "Water sports" and he is the head of the department.

*His educational background includes a Ph.D. in Physical Education and Sport, (St. Cyril and St. Methodius" University of Veliko Tarnovo, Bulgaria 2012), a master's and a bachelor's degree in Physical Education and Sport, (St. Cyril and St. Methodius" University of Veliko Tarnovo, Bulgaria 1996).*

*His experience is related with physical education and sport for children with special educational needs and early education in mini volleyball. In the past he was a football referee in Bulgarian first league in football and in present times he is the coach of students' volleyball team at "St. Cyril and St. Methodius" University of Veliko Tarnovo.*

*In the last ten years he has benefited of numerous Erasmus teaching grants in Romania, Belgium, Spain, Latvia, Lithuania, Albania and Poland and he is the organizer of two Erasmus intensive programs in the field of recreation in seaside resorts and urban sports in Bulgaria.*

*During his academic work he has published more than 30 scientific publications, one monography, one book and two university textbooks.*

## **KEYNOTE SPEAKERS**

### **DESIGN OF PERFORMANCE TRAINING DURING PANDEMIC TIMES**

**CRISTINA MARIA Man<sup>a</sup>**

---

#### **Abstract**

*Complete lockdown decreed in March 2020, created a situation without precedent in the performance sports world, professional athletes could not leave their houses anymore to train. All training programs prepared by their coaches had to be rethink and to be in accordance with the newly imposed restrictions*

*The pandemic situation also brought into discussion and emphasized one of the most important aspects lacking in performance training, namely mental toughness. So, all physical training had to be rethink, having in mind that no one could say for sure how long this situation will last and for how long will the athletes have to stay isolated. Due to the isolation, technical-tactical training had to be replaced with theoretical training. Physical training had to be adapted to indoor or to the proximity of each one's home, so it needed to reach a high level of personalization. Extra attention had to be paid to strengthen the body's immune system and avoid health problems in general.*

*With most of the important competitions, the Olympic Games, World & European Championships, postponed it was very difficult to keep athletes into a high motivation state.*

*This period was hard on many athletes, some of them losing the chance of a lifetime, for which many trained all their life.*

**Keywords:** *performance, training, pandemic times*

---

#### **Author affiliation**

*<sup>a</sup>lecturer at the Department of Physical Education and Sport, Faculty of Law and Social Sciences, "1 Decembrie 1918" University of Alba Iulia, Romania*

**Selective bibliography**

Alsaywid, B., Housawi, A., Lytras, M., Halabi, H., Abuznadah, M., Alhaidar, S. A., & Abuznadah, W., 2020, *Residents' Training in COVID-19 Pandemic Times: An Integrated Survey of Educational Process, Institutional Support, Anxiety and Depression by the Saudi Commission for Health Specialties (SCFHS). Sustainability*, 12(24), 10530.

Pervez, A., McCurdie, F., & Poon, D., 2020, *The pursuit of radiology training in times of a pandemic. BJR| Open*, 2, 20200039.

Szram, J., & Vaux, E., 2020, *Pandemic times: Learning well in a time of COVID-19. Future healthcare journal*, 7(2), 100.

**Man Cristina Maria** (born in Blaj, Romania, August 1976) is since 2016 a lecturer at the Department of Physical Education and Sport, from the Faculty of Law and Social Sciences of the "1 Decembrie 1918" University of Alba Iulia, Romania, where she teaches the following courses: "General bases of athletics", "Theory and practice of athletics", "Methodology of teaching athletics in school".

Her educational background includes an Ph.D. in Physical Education and Sport & a master's in Sport Science, both from the Faculty of Physical Education and Sport, Babes-Bolyai University of Cluj-Napoca, Romania and a bachelor's degree from Faculty of Finance and Banking (Spiru Haret University of București, Romania, 2009).

Her work experience is closely related to the domain of physical education and sports, being an ex-performance athlete (CSS Blaj 1990-1996; University of Cluj-Napoca 1996-2000; RESDA Epinal, France 2000-2001) and a professional nationwide recognized, being the Vice President of the Romanian Athletics Federation, President of the Alba County Athletics Association & a coach of the National Romanian Team. As a coach she won numerous medals at national level in all types of events: sprint, semi-long distance, long distance, the most important ones being: 10 gold medals at the Balkan Championships, 6th place at the European Running Championship Montana - Bulgaria 2010, 5th place World School Cross Country Championship - Slovakia 2012, 3rd place World School Cross Country Championship Israel 2014.

Authoress of a book, published at the Risoprint Cluj-Napoca and numerous interdisciplinary studies, with yearly participations in institutional development grants.

## **START TO SWIM: A NEW LEARNING LINE IN SWIMMING EDUCATION IN FLANDERS, BELGIUM**

**SABINE Goeminne<sup>a</sup>**

---

### **Abstract**

*The history of the teaching of swimming has been dominated by tradition: reach as soon as possible the 25m mark. We note that swimming education in Flanders too often works too quickly and too specifically towards a regulated swimming stroke. Breaststroke is usually taught as the first swimming stroke. There is less attention for various water skills.*

*In 2015, a team of 4 experts in swimming education developed a new learning line. Swimming in this learning track starts from a broad perspective: introducing children to multiple water skills and swimming strokes. It is based on water safety and a motor development towards being able to move efficiently in the water.*

*In the past, the learning process was divided into getting used to water and learning to swim. In the new swimming learning line, the process of learning to swim comprises 3 major blocks: getting used to the water, learning to survive and learning to swim safely.*

*The learning process is divided into 6 levels: Phase 0: baby and toddler habituation Phase 1: water habituation, Phase 2: learning to survive, Phase 3: learning to move efficiently in the water, Phase 4: swim differently, Phase 5: swim better.*

*At Vives University of Applied Sciences, we teach this learning process to our Physical Education students to help determine swimming education in Flanders.*

**Keywords:** *swimming, water safety, learning line*

---

### **Author affiliation**

<sup>a</sup>*lecturer at the Department of Education, Vives University of Applied Sciences*

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## **Book of abstracts**

*International Student Conference*

*Sport Activities & Rehabilitation in Contemporary Societies*

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### **Selective bibliography**

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**Sabine Goeminne** (born in Blankenberge, Belgium, June 1965) is since 1997 a lecturer at the Department of Education from Vives University of Applied Sciences (associated KU Leuven, Catholic University of Leuven), Torhout, Belgium. More specific for the Physical Education and Sport students, she teaches courses like “Didactics in Physical Education”, “Methodology of teaching swimming in schools”, “Physical Education for toddlers”, “Sports for target groups”, “History of Physical Education” and practical lessons in swimming.

*Her educational background, done at KU Leuven, Catholic University of Leuven, Belgium, includes a master’s degree in Physical Education and Sport and two bachelor’s degrees, one in Physical Education and Sport and another one in Teacher Training.*

*Her work experience is related to the domain of physical education and sports, with an emphasis on teacher training.*

*In the last 20 years she has benefited of numerous Erasmus teaching grants in Romania (Oradea, Timisoara, Cluj-Napoca) and China (Hangzhou Normal University).*

**ABSTRACTS**  
**PHYSICAL EDUCATION & SPORT PANEL**

**DEVELOPMENT OF UNIVERSITY SPORTS DURING PANDEMIC  
TIMES**

**MARIELA Nikolaeva Nikolova<sup>a</sup>**

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**Abstract**

*The aim of this study is to conduct a survey on the possibilities for practicing sports during a pandemic in Bulgarian universities. Orienteering and climbing are attractive sports that stimulate mental and physical development.*

*In addition, these sports are proven to be effective for both injury prevention and rehabilitation. Such events as student tournaments or even regular training during school year contribute significantly to university's community. Global crisis during last two years has affected seriously this sector of education. The research methods used are theoretical analysis and survey. The data from the study were subjected to frequency and graphical analysis.*

*Results prove that global pandemic is detrimental for climbing, as a sport that requires specific skills that are most safety to learn in a gym with a coach. This year's National University Championship held on May 26, but with limited duration and less disciplines. The issue of Orienteering is quite different. As an outdoor sport, its practice was not hindered. Despite the anti-epidemic measures, orienteering athletes continue their active training as before.*

*Analyzing the results of our enquiry, can be concluded that outdoor sports are more accessible, while indoor sports require the maintenance of facilities and instructors available to practice.*

**Keywords:** climbing, orienteering, sport development

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**Author affiliation**

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## **CRITICAL PHASES OF COORDINATION DEVELOPMENT AND RELATIONSHIP WITH MOTOR LEARNING – A REVIEW**

**XHESJANO Bani<sup>a</sup>**

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### **Abstract**

*Physical education and sport professionals do not doubt that age 10-12 years is characterized by a very good motor learning ability in the life of children, fact sustained by research in the field. According to specialists' motor learning ability can also be improved after the age of 12 because of increased motor experience and intensive practice.*

*The purpose of this review is to identify approaches referring to the critical phases of coordination development and their relationship with motor learning.*

*Methods used are literature review and analysis of data about critical phases of coordination development and relationship with motor learning found in the research literature.*

*Various authors have tried with different experiments to prove that greater effects can be achieved with equal stimulation between the ages of 8 and 10 than in puberty and adolescence. The body's greatest response to the training stimulus is the decisive factor in the sensitive phase.*

*Periods before puberty can be used especially for appropriate stimuli, in terms of coordination and speed. The period of puberty is associated with impaired coordination and depends on the biological age, growth intensity, extent, and intensity of physical exercise, which are reflected in the degree to which motor skills and sports techniques develop.*

**Keywords:** motor development, critical phases, childhood

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### **Author affiliation**

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## ***PARTICIPATION OF GIRLS IN SPORTS - A STUDY IN THE CONTEXT OF THE SOCIOECOLOGICAL APPROACH***

**HATICE MIRAY Al<sup>a</sup>**

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### **Abstract**

*During the last years, children and young people, were investigated in correlation with the factors that affect their participation in physical activity. Risk and multiple factors were considered together, rather than traditional approaches based on linear causation.*

*The aim of this study is to understand the reason of participation and continuation of sports in the case of girls, taking into consideration individual, social & physical influencing factors. A total of 27 girls with ages between 9-17 participated in this research & the interview method was used. Participants were licensed athletes in a club for at least one year.*

*In the context of gender, sports remain sexist, girls still being excluded. Participation of girls in sports are influenced by parents & are gender based in their preferences. Also, gender ideologies about being a sportsman or a sportswoman, are based on their own experiences.*

*In most of the sports, girls declared that they did not fit well, sports being more dominant among men. Boys made fun of girls regarding their participation in sports and from this perspective their participation in sports is negatively affected.*

**Keywords:** *participation in sports, socioecological approach*

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### **Author affiliation**

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## **IMPROVING MOTOR SKILLS AND PHYSICAL CAPABILITIES THROUGH YOGA**

**ȘTEFAN Moroșanu<sup>a</sup> & VLAD TEODOR Grosu<sup>b</sup>**

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### **Abstract**

*Yoga is a group of physical, mental and spiritual practices or disciplines that emerged in ancient India. Yoga is one of the six philosophical schools of Hinduism. The term "Yoga" in the Western world often denotes a modern form of hatha yoga and yoga as an exercise, consisting largely of postures or asanas.*

*Recognizing the benefits of practicing yoga to promote general health, in recent years, yoga programs for children have been implemented in several countries. Although yoga is an ancient practice that seeks a balance between body, mind and emotions and the literature highlights its benefits on motor, physical, cognitive and social aspects, its effectiveness on children is very little studied.*

*Intervention programs on motor skills in childhood were effective in providing participants with benefits in terms of motor, emotional and social development.*

*The aim of this study was to investigate the effects of a 12-week yoga program on the motor skills of 10-11 year old children.*

*Based on the results of this study, we suggest that a 12-week yoga program has had positive effects on the development of children's motor and physical parameters, especially on balance, strength and flexibility.*

**Keywords:** *yoga, motor skills, physical capacities*

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## **TECHNOLOGY IN CONTEMPORARY VOLLEYBALL**

**MIHNEA-GABRIEL Cozma<sup>a</sup>**

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### **Abstract**

*Over time, the game of volleyball has gone through various stages of development, being a permanent challenge for coaches, regardless of age and training of athletes.*

*The permanent updating of the didactic models can lead to an increase efficiency of the teams' outcomes by constantly introducing procedures involving elements in accordance with the advancement of technology.*

*The chosen theme is of special interest for both coaches and athletes given the ongoing developments in the game itself, training methods and game schemes, as well as in the elements of equipment, nutrition, post-exercise recovery.*

*In order to obtain the necessary data, we used the interview as a research tool. We chose this method because it provides an overview of how objective reality is reflected in the subjective system of opinions of individuals.*

*I consider that after interpreting the data, the hypothesis, according to which the use of technology in volleyball increases the performances and implicitly the results, was tested and validated.*

*The implementation of advanced technology is part of the paradigm of permanent updating of teaching models, according to which we can increase team performance by constantly changing and adapting the procedures.*

**Keywords:** *evolution, technology, volleyball, performance*

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### **Author affiliation**

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## **CHILDHOOD GAMES AND THEIR RELEVANCE IN CONTEMPORARY SOCIETY**

**PAUL-ALEXANDRU Pătruțiu<sup>a</sup>**

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### **Abstract**

*Games have countless benefits from a psychological, educational, social and physical point of view: it trains attention, thinking, language, imagination, assimilates experience, behaviors and information, develops interpersonal relationships, trains and develops the child's physical abilities. During the game, the child develops skills that will help him throughout his life. Games help him maintain a good mental shape, which also helps with higher school performance. The benefits of games are not only those already listed, but outdoor games (movement games) also strengthen the child's immune system, maintain good fitness, burn calories which if they would lead a sedentary life, would represent a high risk of obesity or a potential trigger for many other diseases.*

*In order to obtain the necessary data, we used a questionnaire consisting of 17 questions with multiple answers. The questionnaire was distributed to parents through chat applications embedded into the social media networks.*

*Today's children practice childhood games only occasionally, because with the evolution of technology and television, their attention has been redirected, from an early age, towards videos on the Internet or video games. The changes that today's society is going through have made parents more distrustful, because many no longer leave their children unattended, and in the absence of common play time, they often opt for the most convenient solution.*

**Keywords:** children, play, learning, development

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## **INFLUENCE OF THE ENVIRONMENT ON THE OPINION REGARDING THE PRACTICE OF PHYSICAL ACTIVITIES**

**ANDREEA-IONELA Țetcu<sup>a</sup>**

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### **Abstract**

*The mentality represents the collective impression and the way of thinking and feeling of people or a social community.*

*The many benefits of lifelong exercise and exercise are well documented, as these activities generally improve the quality of life, as confirmed by the World Health Organization. Researchers confirm the importance of physical activity and sport for the development of children and adolescents and suggest that there is a link between participation in physical activity and sports in adolescence and levels of physical activity in adulthood. In the EU, there is a positive correlation between physical activity levels and life expectancy, which means that life expectancy tends to be higher in countries with higher levels of physical activity.*

*In order to collect data for this research, we distributed, between November 15, 2020 - January 15, 2021, a questionnaire that included 15 questions*

*Following the approach, I think we can say that there is some discrepancy between the perceptions of people in the European Union regarding the way in which sports activities are practiced.*

**Keywords:** *environment, sports activities, mentality*

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## **PSYCHOLOGICAL TRAINING OF HANDBALL REFEREES**

**MARIA-MIRABELA Zsido<sup>a</sup>**

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### **Abstract**

*For a good organization and unfolding of competitions, professional people are needed. Bilateral games must be officiated by referees authorized by the Romanian Federation for each sport. Transparency and high level of professionalism in these situations is very high.*

*The concept of psychological training of referees is a requirement increasingly expressed by many experts in the field. It is considered to be an essential component, as the development of physical, mental & social skills, helps to achieve a more effective concentration under stress.*

*Physical and theoretical training must be done at the same time as psychological training, as there is a very close mutual conditioning between them.*

*In order to obtain the data necessary to complete the research project, we used a questionnaire, consisting of 20 questions to find out if the referees consider necessary psychological training and/or if they manage to cope with mental pressure from both coaches or players and of a hostile audience.*

*The result of this study was promising, because an extremely high percentage of the referee questioned considered that psychological training is very important and that, following a well-structured training, they will be able to prevent reactions to offensive events that would disturb their mental state.*

**Keywords:** *psychological training, referees, handball*

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## **KINESIOTHERAPY PANEL**

### **THE SCHOOLBAG, FACTOR OF INFLUENCE IN PUPIL'S LIFE**

**IOANA-CĂTĂLINA Cifrea<sup>a</sup>**

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#### **Abstract**

*Children while still in development of their bodies, especially those in the primary school cycle, should not under any circumstances carry excessive weights for long periods of time. Due to the excessive weight of the backpacks, at these age groups there are more and more posture problems and disorders of the musculoskeletal system, which must cope with this daily stress.*

*European rules have tried to standardize the optimal weight of a backpack. Although there is no full consensus, it has been concluded that a limit of 10% of body weight can be considered reasonable as an acceptable load.*

*In order to obtain the necessary data for this study we used a questionnaire, which is based on the Cornell musculoskeletal discomfort questionnaire and contains closed questions, aimed at obtaining information of clinical/pathological relevance, combined with elements related to demographic data, living environment, methods of traveling to/from school or the situation during classes.*

*Based on the data collected, we can conclude that most of the children included in the study are 11-12 years old and have musculoskeletal pain after long wearing the backpack, which weighs 6 kg or more.*

**Keywords:** *backpack, children, deficiencies, posture*

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## **THE NEED OF KINESIOTHERAPISTS IN ROMANIAN SCHOOLS**

**CORINA-DORINA David<sup>a</sup>**

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### **Abstract**

*Periodic evaluations of students by the medical staff of the educational institution, along with a kinesiotherapist, with the aim of an early detection of certain deficiencies/diseases and their guidance to specialized medical staff are essential. An early detection of certain postural deficiencies would primarily increase the success of recovery and avoidance of health problems that would occur later, with an influence upon the daily activity of the future adult.*

*The main role of the kinesiotherapist in schools would be to educate, starting with the parents, through meetings organized at least once a semester, in order to bring to their attention, the need and benefits of their presence in the lives of children.*

*The questionnaire totaled 16 questions and I have received 163 valid answers, which managed to help me identify a general opinion, based on age, educational level and how they perceive the need for physical therapy and physical activity, of their children.*

*This approach confirms that the presence of a kinesiotherapist in schools would be as welcomed as the presence of a speech therapist or psychologist. The prophylactic and recovery programs could be realized in a perfect symbiosis between the physical education teachers and the kinesiotherapist, these completing one another. On the other hand, there is a need for the involvement of parents who need to be informed about the purpose of physical therapy and its importance from the prophylaxis phase.*

**Keywords:** kinesiotherapist, school, physical exercise

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## **RECOVERY OF JOINT ANKLE STIFFNESS, SECONDARY TO MALLEOLAR FRACTURES**

**MARIUS-IULIAN Drăgan<sup>a</sup>**

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### **Abstract**

*Kinesiotherapy is extremely important in recovering the ankle joint because this joint provides stability to the whole body. In the case of fractures with displacement, comminutive and with secondary instability of the ankle, surgical treatment is required, followed by a kinesiotherapeutic recovery program.*

*More and more clinics abroad and in Romania use state-of-the-art techniques and equipment in medical recovery, both for high-performance athletes and for subjects who have suffered domestic or road accidents. As time becomes limited, the recovery of joint pain with the help of state-of-the-art medical equipment becomes a priority, so that a device like FIZIOTEK acquires an essential role in recovering ankle mobility during physical therapy sessions.*

*In this study, the subjects came from the Sibiu County Emergency Clinical Hospital. The study was conducted between July 15 and September 15, 2020, each subject being followed during 42 sessions (two months). Ten subjects who were previously diagnosed with malleolar fractures treated by metal osteosynthesis were monitored, based on the clinical examination and the radiographic examination and from these we decided for the present paper to make known the results of two of them.*

*Mobility improved in all subjects on both plantar flexion and dorsiflexion. There is an average increase in mobility by at least 5 degrees in subjects who used the passive mobilization device.*

**Keywords:** *ankle fracture, recovery, FIZIOTEK*

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## **THE IMPACT OF INTERMITTENT FASTING ON THE BODY**

**MARIA-COSMINA Ghioanca<sup>a</sup>**

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### **Abstract**

*Food has a major impact on quality of life, as it allows the harmonious development and maintenance of health throughout the body. The first research on intermittent fasting began around 1915, but it was not until the 1960's that interest in this type of research grew.*

*The present paper has as main tool for data collection a questionnaire consisting of 16 closed questions, with two up to seven answer options. This questionnaire was designed and structured in order to highlight the interest of respondents in this type of lifestyle, namely intermittent fasting. It was applied during December 2020 and sent to subjects online, through Facebook, to several groups, regardless their main topic of foundation, in order to reach a large and diverse number of subjects. In the end I've obtained a number of 63 valid answers.*

*The data collected for the research revealed that a significant number of respondents, at least 55.6%, practice at least one form of intermittent fasting, but only 20% of them do it in a consciously manner. Regarding the correlation between intermittent fasting & demographic parameters such as age, sex, level of education or marital status, none of them seem to influence it in any particular way.*

**Keywords:** *intermittent fasting, nutrition, health*

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## **THE IMPORTANCE OF KINESIOTHERAPY AND MASSAGE IN CIRCULATORY DISEASES**

**OFELIA-ELENA Păsărea<sup>a</sup>**

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### **Abstract**

*This research aims to highlight the importance of combining methods like kinesiotherapy and physiotherapy with manual therapies, like the massage, in case of circulatory diseases.*

*It is important and essential that every individual who has developed a circulatory condition, to turn with confidence to specialized personnel, in order to be able to intervene & prevent aggravating consequences that could even possibly endanger their lives. It is also important that all persons working in the field of therapy and recover, know in detail all aspects that could help all those who face circulatory disorders.*

*The research, which took place over a period of three months, was based on the evolution of two similar subjects in terms of particularities, both females, with an age between 50-60 years, without any considerable differences in terms of lifestyle or physical aspects that could alter the results.*

*Following the results obtained, it can be stated that the subject who benefited from a greater attention and involvement from the kinesiotherapist, by introducing massage techniques into the recovery program along with the isometric exercises, had a recovery rate much higher than the subject which did only the isometric exercise program.*

**Keywords:** *recovery, thrombosis*

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## **POSTURAL DEFICIENCIES OF PERSONS EMPLOYED IN MULTINATIONAL COMPANIES**

**EUGENIA Procopii<sup>a</sup>**

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### **Abstract**

*We live in the age of speed and consumerism. Through modern technology, we can achieve many things without having to leave the house. Sedentary lifestyle, unbalanced diet and lack of physical exercise are part of modern human life. Many jobs are static, employees work in front of machines, more or less intelligent, in sitting positions, with or without breaks. For certain tasks we only need a laptop and a Wi-Fi connection and we can work from any corner of the world. More recently, the multinational companies from Romania began to offer the opportunity to work from home, the so-called "home office", with the risk for the employees of working overtime and implicitly more hours spent in faulty positions in front of the computer. A very important aspect with a significant impact is the ergonomics of the workspace, which is often neglected or lost sight of, either by the employer or employee for various reasons.*

*In order to obtain the data, we questioned employees from multinational companies with over 2000 employees from Alba County and Sibiu County, Romania, between November 2020 and January 2021.*

*Following the obtained results, we can conclude that in the mentality and practice of Romanians employed in multinational companies, occupational diseases are present, felt and confirmed in proportion of 82%, however only 19.7% are really interested in their health and follow a rehabilitation program.*

**Keywords:** *deficiencies, ergonomics, recovery*

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