

## **Contents**

<b>1. Sport, exercise and Physical Education in the social sciences . . . . .</b>	9
Irena Martíková: The problem of safety in martial arts and martial sports . . . . .	11
Monika Zaręba, Elżbieta Cieśla: Dexterity and the level of physical fitness and motor skills in 6-year-old Polish children . . . . .	21
Anna Zwierzchowska, Krystyna Gawlik: Somatic growth and motor abilities of hearing-impaired children and adolescents . . . . .	31
Milvi Visnapuu, Katrin Karuauk: Relationships of playing performance characteristics with anthropometrical parameters and motor abilities . . . . .	41
Elżbieta Cieśla: Relationship between time devoted to computer games and physical fitness of Polish pre-school children . . . . .	51
David Cihlář, Ladislav Pyšný, Jana Pyšná, Dominika Petrů, Michaela Bělunková, Petrá Prudičová: Do sports teams affect the intake of cannabis in a group of high school students in Ústí region? . . . . .	63
Eugenia Mandal: Sport activity and body image of men and women . . . . .	71
Jaromír Šimonek: Attitudes of Slovak female adolescents to their health . . . . .	83
Ružena Popović, Tijana Purenović-Ivanović, Milan Dolga: Motor coordination of PE students: Gender differences . . . . .	93
Adrian P. Lubowiecki-Vikuk: Single senior citizens' praxeological orientation to leisure-time physical activity . . . . .	105
Krzysztof Pezdek, Tomasz Michaluk: The Polish Football Association and the problem of management through exclusion . . . . .	117
Jiří Němec, Tomáš Miler: Lifeguards and their working conditions in the Czech Republic . . . . .	125
<b>2. Exercise physiology, nutrition and genomics . . . . .</b>	137
Ewa Sadowska-Krępa, Barbara Kłapcińska, Izabela Zająć-Gawlik, Tomasz Podgórski, Ilona Pokora: Metabolic effects in older women of consumption of an açai pulp-fortified polyphenolic rich fruit and berry juice . . . . .	139
Jan Heller, Pavel Vodička: Anaerobic performance capacity in Czech ice hockey players: a comparison of the results in forwards, defenders and goalkeepers aged 15 to 35 years . . . . .	149
Markéta Rodová, Alena Žákovská, Daniela Chlibková, Ivana Tomášková: Comparison of selected immunological and biochemical parameters in ultra runners and ultra cyclists participating in 24 hour races and multi-stage races . . . . .	159
Štefan Balkó, Iva Balkó, Hana Týnková, Jan Heller: Loading effects of the organism on reaction time level in elite and sub-elite fencers . . . . .	169

<b>3. Kinesiology, Biomechanics</b>	179
Olga Borao Soler, Antoni Planas Anzano, Vicente Beltran Garrido, Francisco Corbi Soler: Assessing the results of a proprioception training programme using the SEBT	181
Pavol Čech, Ján Junger, Róbert Kandráč: Monitoring the level of postural stability after modification of size of support surface	189
Lutz Shega, Daniel Hamacher Dennis Hamacher: Effect on gait stability of walking with real time augmented reality	201
Milan Hybner, David Gerych: Effect of running technique on rifle shooting accuracy	207
<b>4. Sport training</b>	213
Jaroslav Broďáni, Matej Tóth: The dynamics of the work-out load of a 50K walker in the London Olympic macrocycle	215
Denisa Zambová, Peter Mačura: The effect of a training programme on the accuracy of basketball shooting	225
Zuzana Tonhauserová, Martin Pupiš: A diagnosis of the current state of reaction capabilities of elite Slovakian swimmers	233
Martin Pupiš, Ivan Čillik, Zuzana Tonhauserová, Jože Štíhec, Ratko Pavlovič: Intermittent hypoxic training as an alternative to high altitude training	241
Klaudia Zusková, Jiří Šlédr: Sport psychology as a natural part of sport training – practical application of a holistic view	249
Ákos Patócs, Barbara Selmeci, Lilla Török, László Tóth: Psychological examination of top level fencers by the Vienna Test System (VTS)	259
<b>5. Children and sports training</b>	269
Monika Zaręba, Elżbieta Cieśla: Health-related fitness in six-year-old children born pre-term	271
Rudolf Horváth: Diagnostics of coordination and physical condition skills of Romany children attending primary schools and their comparison with standard values	281
Elżbieta Cieśla, Monika Zaręba: Level of physical fitness in relation to type of laterality, age and gender among pre-school children	289
<b>6. Economics, management and marketing of sport</b>	301
Vilma Čingienė, Skaistė Laskienė, Gabrielė Vyštaraitė: The organizational performance of Lithuanian sport federations	303
Alexandr Ščiklin, Jiří Novotný: Issues in the valuation of professional sports clubs in the Czech Republic	311
Vilija Bitė Fominienė, Vilma Čingienė, Skaistė Laskienė: Evidence-based motivation of fitness industry professionals	321
Jiří Kotáb: Demand analysis for league matches of AC Sparta Prague	331
<b>7. Physical training in the Army</b>	343
Lubomír Přivětivý: Characteristics of modern operations and their influence on the physical training of soldiers	345
Judit Bolgár, Agnes Györfi, István Csomós: Modelling extreme stress effects in the field of public services, and the development of strategies and methods of coping	353
Henn Antson, Meelis Stamm: Effects of conscripts' prediagnosed diseases on their physical performance at the end of the BTC, with the example of a unit in the Estonian army	365