От редакции

Дорогие читатели!

Журнал отмечает юбилеи дорогих и значимых в деятельности нашего журнала главного редактора, доктора психологических наук, профессора, научного руководителя Центра фундаментальной и консультативной персонологии департамента психологии Вадима Артуровича Петровского и члена нашей редакционной коллегии, доктора психологических наук, профессора, заведующего Международной лабораторией позитивной психологии личности и мотивации департамента психологии Дмитрия Алексеевича Леонтьева. Редакция журнала поздравляет юбиляров, желает крепкого здоровья, благополучия и творческого вдохновения!

Полный текст поздравлений размещен на сайте журнала:
https://psy-journal.hse.ru/news/318502709.html

Special Theme of the Issue.
Sports Psychology:
From Self-Regulation to Digital Technologies

EDITORIAL

Sports psychology is considered to be one of the most dynamically growing psychology branches. This is due to both technological innovations, such as virtual reality, eye-tracking, artificial intelligence (AI), and increased competition of athletes, which results in higher workload, younger age of career onset, and search for alternative training approaches. Elite athletes often compete at their physical and physiological limits. It is therefore a proper psychological training that may be critical to an athlete's performance.

Sports psychology is most strongly characterized by the complexity of applied approaches. Thus, ideomotor training, coping strategies and self-regulation methods remain relevant and sought-after by athletes. On the other hand, the rapid evolution of innovation and AI allows for even greater improvements in athletes' training. Given this diversity of innovative sport solutions, not only the increasingly advanced technologies used for athlete diagnosis and training are essential, but also a systematic and evidence-based methodology based on research and scientific data.

At the moment, a range of research groups in Russia are active in conducting scientific studies related to the sports psychology issues. Some of those studies are presented in this special issue that also features a collaboration between our colleagues from the Faculty of Sport and Physical Education at the University of Novi Sad in the Republic of Serbia.

The articles included in this special issue give a clear reflection of the key trends in the modern development of sports psychology: psychological methods and approaches (coping strategies, self-regulation, mental toughness, etc.); studying psychophysiological parameters of sport, including comparison of professionals with novices in order to identify the most relevant attributes; development and implementation of digital technologies in the psychological training of athletes.

The article of E.N. Danilenko et al. examines the coping strategies of highly skilled athletes across various sports, utilizing psychological assessments through the "Coping Inventory for Stressful Situations" (CISS) and a biofeedback-based training program called "Honey Bear." The program, implemented with the "BOS-PULSE" system, tracks physiological parameters such as cardio interval duration and skin conductance. Results indicate that athletes predominantly employ adaptive coping strategies, including both problem-focused and emotion-focused approaches. The analysis further categorizes athletes into two groups based on their emotional reactivity: those with normal/reduced reactivity and those with excessive reactivity. The findings highlight the need for corrective health measures for athletes exhibiting emotion-focused coping and excessive emotional responses, recommending gaming biofeedback technology as an effective intervention.

The work of A.A. Yakushina, E.A. Filippova, and S.V. Leonov has also explored coping strategies used by the injured athletes with regard to their gender, a type of sport and injury severity. The results show that the choice of coping strategies varies among injured athletes: males and athletes from contact sports are more prone to use avoidance strategies for severe injuries, whereas females and athletes from non-contact sports tend to use problem-focused strategies for mild injuries.

The mini review by N. Lakicevic and E. A. Panfilova considers such a crucial psychological construct as mental toughness based on combat sports. Athletes in combat sports are constantly faced with high levels of stress both during training and competition. Mental toughness becomes the factor that separates average athletes from real champions.

The study of K.A. Bochaver, S.I. Reznichenko, D.V. Bondarev explores the relationship between psychological resources — authenticity, mental toughness, and resilience — and commitment to the "Spirit of Sport" values among 418 male professional athletes from Russian national teams. Utilizing various scales and analyses, three athlete typologies were identified: high-resource (51%), medium-resource (32%), and low-resource (17%), with mental toughness as the key differentiator.

The article of I.S. Polikanova, A.A. Gasanov, and S.V. Leonov presents the results of a pilot study using a virtual reality (VR) environment developed by the authors that simulates running and shooting in biathlon. This article analyzes the factors that affect the standing shooting performance in biathlon.

The work of L.R. Sufiyanova et al. investigates the psychophysiological aspects of self-regulation during post-exertion recovery in phygital athletes competing in sports such as football, basketball, and shooting. Using the BOSLAB-self-regulation system, stress tests were administered to assess the participants' self-regulation under stress, measuring electrocardiogram and skin conductance response before and after testing. The sample included 73 athletes and a control group of 13 competition administrators and referees. Findings revealed that phygital athletes exhibited twice as many instances of elevated heart rates and 1.5 times more excessive emotional reactivity compared to traditional athletes, with few showing no response to stress tests.

M.M. Tcepelevich and A. M. Mukhamedov studied the correlation between the accuracy of moving objects tracking in three-dimensional space and task parameters, as well as the playing position of hockey players aged 13 to 15. Twenty-nine forwards and twenty defencemen took part in the test and performed tasks using a virtual reality setup. Key metrics such as task accuracy, total path length, collisions, occlusions, and motion speed were recorded. Analysis revealed that higher motion speeds and frequent occlusions from distractors negatively impacted tracking accuracy, underscoring the importance of considering various task parameters in athlete assessments.

The work of A.P. Kruchinina and I.S. Polikanova was aimed at studying eye and head movement parameters in biathletes of different skill levels, including beginners, in order to determine the distinction that affects shooting performance. Biathlon shooting is a critical factor influencing an athlete's success, impacted by elements such as muzzle blast, rifle recoil, aiming patterns, and environmental conditions. Elite biathletes exhibited minimal gaze path length after shooting, lower pre-shooting head and gaze velocities, a smaller normalized ellipse square, longer and fewer fixations, and less blinking, all correlating with enhanced concentration and shooting efficiency.

E.A. Panfilova's study assessed psychomotor parameters in twenty-four female aerobic gymnasts aged 12 to 17, divided into Youth and Junior Divisions. Conducted during an off-season, the research identified that tests measuring mobility, balance, and nervous process intensity were most effective in evaluating psychophysiological parameters. The content of the articles in this thematic issue suggests a diversity of approaches to the psychological preparation of athletes in the context of modern sports today.

I.S. Polikanova