

#### NATIONAL UNIVERSITY OF PHYSICAL EDUCATION AND SPORT OF BUCHAREST





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Sport Psychology Conference

Advances in sport psychology - new insights and discoveries
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#### THE BOOK OF ABSTRACTS

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### **ABSTRACTS**

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#### **Book of Abstracts**

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Sport and technology have changed considerably over time, the advancement in technology being an advancement for athletes' training and performance.

In this context, psychology often makes the difference between good and great athletes, between the gold medal and the other positions in the ranking.

For this reason, in order to better understand the mental factors affecting participation in sport and physical activities, we invite you to explore the sport psychology scene.

The fierce struggle for winning in competition can generate violence and aggressive behaviors, especially in the case of young athletes, potentially affecting their mental health.

Our event aimed to bring together researchers and academic experts to exchange and share their research findings and ideas on all aspects of sport psychology.

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## SELF-REGULATION IN SPORT: INTEGRATING APPLIED STRATEGIES AND SCIENTIFIC INNOVATIONS THROUGH PUPIL-BASED NEUROFEEDBACK

#### Zsanett BONDÁR

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Self-regulation is a fundamental skill for athletes, enabling them to manage their arousal, focus, and emotional states to optimize performance and enhance overall well-being. While traditional sport psychology techniques - such as visualization, controlled breathing, and mindfulness – have long supported athletes in developing these self-regulatory abilities, emerging neuroscientific advancements offer novel ways to enhance this process. One such innovation is pupil-based neurofeedback (pupil-NF), a cutting-edge technique that leverages real-time monitoring of pupil size as a marker of arousal regulation. The neurofeedback training in the athletic domain is presented, leading to a discussion of our recent research on pupil-NF. Building on the findings of Meissner et al. (2023) which demonstrated that individuals can consciously modulate arousal via pupil size modulation, we examined the applicability of this technique for athletes. In our study, competitive athletes underwent a 12-session pupil-NF training within a virtual reality environment equipped with eye-tracking technology. Alongside the training, they received psychoeducation sessions aimed at developing individualized selfregulation strategies. Results indicated that athletes improved their volitional control over pupil size, successfully integrating arousal-modulation strategies into their self-regulation repertoire. The presentation will highlight how this innovative approach can be effectively combined with established mental training techniques, offering a comprehensive framework for optimizing self-regulation in sport. Through reflections on individual differences, self-awareness, and the synergy between technology and sport psychology, we will discuss practical applications for researchers, practitioners, coaches, and athletes. By integrating pupil-NF with traditional mental skills training, we move toward an idiosyncratic, athlete-focused approach that values both technological advancements and professional sport psychology support in fostering athletic performance and psychological well-being.

**Keywords:** self-regulation in sport, neurofeedback training, pupil size modulation.

### IRONIC PROCESSES OF MENTAL CONTROL IN SPORT: PAST, PRESENT AND FUTURE

#### Recep GÖRGÜLÜ

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The influence of anxiety on motor performance is central to sport and performance psychology. An extensive body of research devoted to determining the nature of the anxiety-performance relationship has investigated numerous theories and models in sport psychology. However, one theory offers a comprehensive mechanism via which anxiety can elicit precisely *counter-intentional* errors. These errors are more severe than general errors and represent the worse possible scenario, that is, making the mistake one least wants to make under certain conditions. Such counter-intentional errors can be explained through Wegner's (1989-2009) theory of ironic processes of mental control. Up to date research in this field recommends using rigorous methodologies, such as randomized controlled trials, to understand the causal effects of distinct stressors on ironic errors. In addition, intervention trials are important to reduce the likelihood of ironic errors. More specifically, recent research studies offer a practical instruction-based solution that can reduce susceptibility to ironic errors and instead help individuals to thrive under pressure. Specifically, performers and practitioners should be educated about ironic effects theory and encouraged to frame instructions in a way that helps athletes to transform their instructions for optimal performance under certain conditions.

**Keywords:** performance, pressure, behaviour.

THE PERSONALITY AND RESILIENCE OF COMPETITIVE ATHLETES AS BMW DRIVERS – A MULTICULTURAL STUDY

Andrzej PIOTROWSKI

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Individual differences in personality and resilience are associated with a variety of social behaviors. The current study wanted to answer the question whether BMW drivers have

different personality profiles and resilience levels compared to drivers from other car brands.

International studies were conducted in India, Latvia, Lithuania, Poland, Romania, Slovakia

and Spain with a sample of 448 athletes using a 20-point Mini-IPIP and Resilience scale. BMW

driver results (n = 91) were compared with results (n = 357) from other German car brands.

Athletes (as BMW drivers) were characterized by higher neuroticism compared to drivers from

other German car brands. They also showed higher resiliency, both in terms of total score and

scores on the subscales of: personal coping competences and tolerance of negative emotions,

tolerance of failures and perceiving life as a challenge, and optimistic attitude towards life and

capacity for self-mobilization in difficult situations. Gender-specific differences among athletes

(as BMW drivers or drivers of other German car brands) were discussed using Dwass-Steel-

Critchlow-Fligner (DSCF) pairwise comparison test. Furthermore, the results of the main

logistic regression analyses highlighted that neuroticism in athletes (as a driver) is an important

predictor of BMW preference. BMW drivers only differed in relation to neuroticism from

drivers of other German car brands. Higher levels of neuroticism can affect mental health and

the general quality of life in athletes. Understanding the behavioral mechanisms of BMW

drivers is possible by taking into account their personality and individual differences.

**Keywords:** athletes, personality, resilience, BMW drivers.

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### RESILIENCE IN SPORT – THE KEY TO LONG-TERM SUCCESS AND BALANCE

#### Georgeta PÂNIŞOARĂ

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Athletes constantly face various stressors, from competition pressure and losses to intense training loads. Understanding and enhancing resilience becomes essential to prevent performance decline and psychological problems. Psychological resilience is the ability to withstand and/or adapt after adversity. Resilience represents a "bounce-back" capacity to return to a previous or higher level of functioning after disruption. It's not a static trait but a constantly evolving process of adaptation. Though often perceived as exceptional, resilience is described by Masten (2001) as "ordinary magic," suggesting it's accessible to all athletes, not just a rare or special trait. Robust resilience refers to the protection that resilience offers to athletes, supporting their well-being and performance levels even under intense pressure. This form of resilience acts as a psychological shield, preventing stressors from significantly impacting an athlete's mental state or competitive abilities. Athletes with robust resilience maintain consistent performance despite challenging circumstances. Rebound resilience is manifested through "bounce-back" qualities, reflected in the minimal impact that adversity has on an athlete's wellbeing and/or performance. Athletes with strong rebound resilience quickly recover from setbacks, losses, or failures, returning to optimal functioning with minimal downtime or performance deterioration. Research consensus indicates that resilience in sport has these three fundamental components: adversity (a perceived negative experience or stressor), the protective factors (include positive personality, motivation, confidence, perceived social support, and focus – these elements allow athletes to use positive appraisals and metacognitions when facing stressors), positive adaptation and finding solutions (the favorable outcome or adjustment in response to adversity).

**Keywords:** rebound resilience, robust resilience, sports performance.

#### FLOW STATE AND PSYCHOPHYSIOLOGICAL COHERENCE: OPTIMAL EXPERIENCES FOR SPORTS PERFORMANCE

#### Cornel Laurențiu MINCU

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Flow states are experiences in which the athlete feels absorbed in the action and in control, imply total concentration, increased satisfaction, an invisible "current" that carries us beyond ourselves, and beyond time. Components of Flow state (Csikszentmihalyi): clear goals, unambiguous feedback, loss of self-consciousness, action-awareness merging, altered perception of time, intrinsic reward, effortless action, a balance between challenge and skill. A systematic review and meta-analysis of the relationship between flow states and performance (Harris et al., 2020) underlined that current evidence does not clearly define how flow influences performance. Therefore, rigorous research is needed to understand how and why flow influences outcomes in sport. Furthermore, no study has demonstrated that flow can be entirely induced through intervention. Techniques such as mental imagery, hypnosis, and mindfulness have been employed (see Goddard et al., 2021 for a review of such interventions and exercise). Considering psychophysiological coherence synchronization) is the degree of synchronization between different physiological systems of the body, which creates a state of efficient functioning of the body, supporting sports performance. It can be assessed by modern technologies that simultaneously monitor brain, heart and respiratory activity. A high level of psychophysiological coherence is associated with a state of calmness, concentration, creativity and flow states; the nervous system is balanced (sympathetic and parasympathetic), while low coherence is associated with distraction, fatigue and stress. As sports psychologists, we have both the opportunity and responsibility to foster conditions that allow them to emerge more frequently, more deeply, and more effectively in sports activity.

**Keywords:** flow, psychophysiological coherence, mind-body synchronization.

#### USING MIXED METHODS TO EXPLORE THE RELATIONSHIP BETWEEN CHRONIC PAIN AND PSYCHOLOGICAL WELL-BEING IN ENDURANCE ATHLETES

#### Lloyd EMEKA

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Athlete participation in endurance sport requires a high level of time investment and energy with their lifestyle planned around training commitments (Falcous, 2017; Hochstetler & Hopsicker, 2016). Endurance athletes such as triathletes engage in extremely intense physical exercise comprised of sequential swimming, cycling and running for miles without a break, and their training and competition involves a considerable amount of stress and pain over several hours daily (Atkinson, 2008). Extant research has typically focused on the study of subject areas such as pain threshold and pain tolerance in endurance sport (Emeka & Meijen, 2023; Johnson et al., 2012). There has been less emphasis on the study of chronic pain in endurance athletes which can be considered as persistent or recurrent pain lasting longer than three months (Fayaz et al., 2016; Treede et al., 2015). Research suggests that chronic pain is a dynamic experience that changes and/or fluctuates over time and can have an impact on psychological well-being (i.e., effective and positive functioning in subjectively valued activities and life) in endurance athletes (Alli et al., 2021; McAuliffe et al., 2017; Turner et al., 2020). This presentation will showcase a longitudinal mixed method study that explores the relationship between chronic pain and psychological well-being in endurance athletes, with a focus on discussing methodological considerations and study design.

**Keywords:** chronic pain, endurance athlete, longitudinal mixed methods, psychological well-being.

### IMPLICIT/UNCONSCIOUS AGGRESSION OF FUTURE SPORT COACHES

### Radu PREDOIU<sup>1</sup>, Cristian VASILE<sup>2</sup>, Vlad GLĂVEANU<sup>3</sup>, Herli PARDILLA<sup>4</sup>, Mihai CIOLACU<sup>5</sup>, Germina COSMA<sup>6</sup>

The study aimed to explore the automatic/unconscious aggression of future sport coaches. One hundred and thirty-one participants took part in the research, aged between 21 and 24 (84 male and 47 female future coaches). An Implicit Associations Test (IAT) was used to assess automatic/implicit aggression. Data analysis revealed that participants obtained (generally) negative D-scores, meaning that they automatically associated Aggression with Others. However: 17.02% of future coaches in team sports (handball, football, basketball, volleyball, n = 47), 16.6% of future specialists from individual sports such as tennis, track and field, swimming and gymnastics (n = 30), 9.52% of future coaches in grappling combat sports (judo and jiu-jitsu, n = 21), respectively 9.09% of future coaches in striking combat sports (taekwondo, boxing, karate and kick-boxing) obtained positive D-scores – automatically associate Aggression with Self. This is particularly important because future coaches will be working with children, and implicit aggression can affect decisions, discipline in training, coaches' actions and how they understand and relate to situations in an unconscious/ automatic way. Statistical analysis of data showed, also, that future coaches from striking combat sports obtained the lowest negative D-scores. We recommend future coaches who scored a positive D-score on the IAT to practice (in their free time) martial arts (e.g., karate and taekwondo), as it appears that practicing these sports can reduce not only explicit aggression (Harwood et al., 2017; Kuśnierz et al., 2023), but also implicit/unconscious aggression.

Keywords: unconscious aggression, IAT, sport coaches, martial arts.

### THE EMOTIONAL CONDUCT OF CHILDREN AND ADOLESCENTS WHO ARE INVOLVED IN PERFORMANCE SPORTS

### Dorina Maria NIJLOVEANU<sup>1</sup>, Ștefania SANDU<sup>2</sup>, Mihaela LUNGU<sup>3</sup>, Andrada Estera ROȘU<sup>4</sup>

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Emotions play a crucial role in sports practice, and it is essential for children and adolescents involved in sports to understand them, as this understanding is a key factor in achieving performance and high-level performance. The main goal of this research was to profile the emotional conduct of children and adolescents engaged in competitive sports, starting with a summary of how emotional development progresses from infancy to adolescence. Among the evaluated variables were aspects of emotional regulation such as emotional control, emotional self-awareness, situational responsiveness, and aspects of emotional awareness such as differentiating emotions, verbal sharing of emotions, and bodily awareness of emotions. The sample consisted of children and adolescents registered with sports clubs, participating in both individual and team sports. A cross-sectional analysis was conducted to identify demographic information, age, gender, and other specific differences among the athletes like training frequency, sports history, awards received, as well as their goals. The results emphasize the importance of raising awareness about the emotional experiences involved in sports and the need to create regulation strategies tailored to specific emotions. This article offers guidance for coaches on how to support children and adolescents in managing the emotions they encounter during training sessions and competitions.

**Keywords**: emotion regulation, emotional awareness, sport performance.

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#### THE EFFECTS OF INSTRUCTIONAL AND MOTIVATIONAL SELF-TALK ON GAZE BEHAVIOUR IN A VIRTUAL REALITY SETTING

#### Sahil PAWADE

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There is concrete evidence from sport psychology research that self-talk does enhance performance. Self-talk (ST) refers to statements that athletes address themselves to achieve some goal. Instructional and motivational self-talk are the most heavily researched types of selftalk that influence performance on a task. But how does the self-talk mechanism work to increase performance is still a question to be answered. Gaze behaviour might be the underlying attentional mechanism of self-talk. To investigate how instructional and motivational self-talk affects gaze behaviour in a virtual reality setting while hitting tennis forehand. A short intervention study was conducted on three participants for six days in a virtual reality setting. The task of the participants was to hit a tennis forehand while using certain self-talk cues. Participant were put into three conditions: 1) Instructional self-talk 2) Motivational self-talk and 3) No self-talk. An HTC Vive head-mounted display VR system was used for the experiment. An eye tracker in the headset recorded the eye and head position of the participants while they used the assigned self-talk cues. No significant relationship was found between instructional ST and gaze behavior. On the other hand, Motivational ST was found to have a significant difference in the number of predictive saccade and timing of predictive saccades after ball launch. Self-talk did show improvement in the performance of hitting a forehand. Gaze variables did not show any consistent changes for a week when participants used instructional ST but for motivational ST it did show changes in two of three gaze variables. Motivational ST had lower number of predictive saccades and higher variation for timing of predictive saccade after ball launch.

**Keywords:** gaze behaviour, instructional self-talk, motivational self-talk, eye tracker.

#### THE IMPACT OF PERSONAL VALUES AND PERSONALITY TRAITS ON HIGH PERFORMANCE OUTCOMES IN PROFESSIONAL MOTORSPORT

#### Cătălin-Flavius STANCIU

Oedip Private Psychology Practice Braşov, Braşov, Romania

The research investigates the impact of personal values and personality traits on high-level performance in professional motorsport, starting from the hypothesis that the driver's psychological profile is oriented toward risk and challenge. The research employed scientifically validated instruments – CP5F (for personality traits), CEV (for personal values) – and was supplemented with clinical interviews. The results indicate a psychological profile dominated by autonomy, social desirability, and emotional stability. The core values identified are challenge, professional recognition, and the need for autonomy. The driver seeks risky activities with a high degree of strategic complexity and shows low tolerance for strict rules or predictable routines. Case studies support the conclusion of a profile focused on efficiency, control, and decision-making, with strong intrinsic motivation. These findings can inform the selection, psychological training, and personalized interventions for elite motorsport athletes. The clinical interview highlighted the following aspects: Drivers who value challenge are more likely to develop complex strategies, push their limits, and respond quickly in critical situations. Those who prioritize professional recognition are highly motivated to achieve top-level performance. Autonomous drivers feel responsible for their own results and are less dependent on external control. Personality traits influence elite motorsport performance through rapid decision-making, stress management, and effective cooperation. A balance between independence and social integration optimizes competitive output. Elite-level motorsport performance is supported by values such as challenge, recognition, and autonomy, along with traits like emotional stability and cooperation, all contributing to fast decisions, adaptability, and strategic efficiency in competition.

**Keywords**: motorsports, personality traits, personal values.

#### KEY PSYCHOLOGICAL COMPETENCIES IN SPORT COACHING: A STUDY USING THE VIENNA TEST SYSTEM

### Zermena VAZNE, Katrina VOLGEMUTE, Andra FERNATE, Viktors VELIKS, Juris GRANTS, Valerija STEIMANE, Dinass TALENS, Eilina ANTAPSONE

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In the demanding context of sport coaching, psychological abilities and cognitive skills play a critical role in performance, communication, and decision-making. Beyond physical expertise, coaches require high levels of concentration, emotional control, and cognitive flexibility to operate effectively under pressure. Identifying these competencies can enhance selection, training, and professional development in sports education. This study aimed to examine key psychological characteristics among sports professionals, using objective psychometric tool Vienna Test System (VTS). The sample consisted of 91 sports educators (including physical education teachers and coaches). Participants completed selected VTS batteries measuring: Impulsiveness vs. Reflexivity, Logical reasoning, Reaction time under stress, General reaction speed and motor speed, Ability to concentrate. Pearson correlation analysis was used to examine associations between these variables and demographic factors (age, gender, education). Reflective individuals demonstrated significantly higher task precision (r=0.737, p<0.01) and better logical reasoning performance (r =0.247, p<0.05). Higher ability to concentrate was associated with both greater accuracy (r=0.285, p<0.01) and faster reactions under stress (r=-0.452, p<0.01). These results highlight the central role of reflectivity, concentration, and psychomotor efficiency in coaching-related performance. Key psychological competencies in sport coaching are interrelated and critical for performance. These findings suggest that psychological testing can inform evidence-based decisions in the selection and development of sport educators, helping to optimize their cognitive and behavioural readiness for high-stakes environments. This research was funded by the framework of the Plan of the European Union Recovery and Resilience Facility and the State budget grant Nr. RSU/LSPA-PA-2024/1-0009.

**Keywords:** sport educators, psychological characteristics, Vienna Test System.

# THE EXISTENTIAL NATURE OF TOUCH EXCHANGE FOR BLIND PEOPLE AS A BRIDGE TO CONFIDENCE AND PARTICIPATION IN PHYSICAL ACTIVITIES: A QUALITATIVE PREPARATORY STUDY USING REFLEXIVE THEMATIC ANALYSIS

#### **Mathias ALBERTON**

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Lack of full proprioception in visually impaired and blind people (VI) negatively affects their lifestyle and, in combination with structural and societal barriers, lead to low participation in physical activities (Alcaraz-Rodríguez et al., 2021; Lieberman et al., 2018), deemed to build confidence and social interaction with further benefit to their phycological well-being (Elsman et al., 2018; Ilhan et al., 2020). Being confident in touching and being touched by people (i.e. touch exchange; TE) is part of exercising and sports, but for VI could be crucial in building self-efficacy in social settings, particularly from a Self-Determination Theory standpoint (Bandura, 2000; Deci & Ryan, 2011; McAuley et al., 2006). Using Reflexive Thematic Analysis (Braun & Clarke, 2006; Braun et al., 2016), this study explored seven semi-structured interviews with VI (two women, five men, mean age 41, one heavily visually impaired, six completely blind) focusing on the influence of TE on confidence and exercising, and produced four overarching themes: 1. Things don't exist unless I touch them; 2. In the right context, TE speaks volumes to human connections; 3. TE gives the freedom to become incrementally confident; 4. Sport and TE build confidence and can drag you away from dark places. The results confirmed TE as a valuable, trainable skill bridging human interactions and physical/psychological well-being against the many negative emotions often perceived by VI. Theoretical and practical implications on the development of Touch Avoidance Scale Questionnaire (Ozolins & Sandberg, 2009) measuring TE confidence levels in future sport psychology interventions bespoke to VI were considered.

**Keywords:** visual impairment, self-efficacy, psychological well-being.

### THE ROLE OF MENTAL TRAINING IN OPTIMIZING PERFORMANCE IN SHOOTING SPORTS - A SYSTEMATIC REVIEW

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The aim of our study was to conduct a literature review of the studies in which mental training was used in shooting sports. To conduct this review, we used the PRISMA2020 diagram, for new systematic reviews that included only database and journal research. The exclusion criteria for the studies were as follows: mental training was studied in relation to other sports (n=121), mental training was not used for sports activities (n=93), mental training was used for other age groups (n=25), and studies that were not open access (n=17). The final articles that met all the inclusion criteria were 23 studies. The participants involved in the initial studies were performance athletes. The results of the included studies showed that the effects between the professional psychological support, performance shooting sports and effective coaching can promote higher performance in precision sports. Within the limits of the study, we note that there is not a very large number of research conducted in the direction of establishing the effects of psychological training in sports shooting. The practical implications of the study highlight the critical role of integrating mental training into the preparation of athletes in precision sports, where a high degree of emotional stability and self-regulation is essential.

**Keywords**: mental training, shooting sports, self-control.

### HEYMANS' CUBE MODEL OF TEMPERAMENT IN THE CASE OF BASKETBALL COACHES

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The Heymans' Cube Model, one of the earliest typologies in psychology, classifies temperament across three axes: Emotionality (emotional vs. non-emotional), Activity (active vs. non-active) and Primary vs. Secondary Functioning. By combining these bipolar traits, the model defines eight temperament types, such as sanguine, phlegmatic, passionate, choleric, or sentimental. This study explores whether temperament characteristics differ significantly among basketball coaches based on coaching performance level (with vs. without national medals), and gender (male vs. female coaches). Participants: 54 basketball coaches (30 male, 24 female) of which 28 medalists at National Championships (U14 or higher) and 26 nonmedalists. Temperament was assessed with a 21-item online questionnaire based on the Heymans' Cube model. Data showed that coaches who earned medals are less emotional, more active, and less prone to passive or reactive behaviors. While the primary/secondary function axis showed no notable difference, the emotionality and activity axes distinguished higherperforming coaches. Also, female coaches scored significantly higher in emotionality (p < 0.001) than male coaches, which means they tend to feel and express emotions more strongly. This suggests that men and women approach emotional regulation and communication differently in coaching roles. When it comes to activity, men had slightly higher scores. Both groups showed very similar results in terms of primary/secondary function (the psychological impact/echo of events) - coaches may be less (primary) or more affected (secondary) by different events. While emotionality and activity showed consistent trends, most differences were not statistically significant. However, their practical implications are relevant, especially in high-stress environments where temperament influences leadership decisions.

**Keywords:** temperament, basketball, coaches' performance, emotionality, activity.

### CHAOS OR SUPERPOWER? WHAT THE RESEARCH SAYS ABOUT ADHD IN SPORT

#### Lukasz PARTYKA

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Attention-Deficit/Hyperactivity Disorder (ADHD) is a neurodevelopmental disorder with a global prevalence ranging from 2.5% to 7.2% (Thomas et al., 2015). According to the DSM-5 (2013), clinical symptoms are categorized into two domains: inattention hyperactivity/impulsivity. These include behaviors such as being easily distracted, having difficulty organizing tasks, and struggling to sustain attention. The prevalence of ADHD among student and elite athletes is estimated to range from 4.2% to 8.1% (Poysophon & Rao, 2018). These numbers are largely estimations, but research suggests that ADHD may be more common in elite athletes than in the general population. Several factors may contribute to this: the stigma surrounding mental health assessment and treatment (Putukian et al., 2011), as well as the fact that children with ADHD may be naturally drawn to sport due to its positive reinforcing effects and the attentional stimulation provided by physical activity (Wolraich, 2011). In some sports or contexts, ADHD traits may be advantageous – such as high energy, risk-taking tendencies, and episodes of hyperfocus (Hyun et al., 2019). However, athletes with ADHD tendencies may also be at increased risk of sport-related injuries (Amemiya, 2022). Symptoms like frustration, lowered self-esteem, and mood lability may further impair athletic performance (White et al., 2014). Sport psychologists may play an important role in supporting athletes with ADHD. Key intervention strategies focus on improving organizational skills, planning, attention regulation, and overall quality of life (Katzman, 2017). This oral presentation focuses on some interesting findings from the field, to spread a word about ADHD in the environment of sport psychology.

**Keywords:** ADHD, mental health, well-being, sport psychology, elite athletes.

### EXPLICIT AGGRESSION IN OPEN (WUSHU KUNGFU) AND CLOSED (TRACK AND FIELD) SKILLS SPORTS

### Ionuț-Alexandru CIUDOIU, Marius STOICA, Andrei-Vladimir MARICA, Radu PREDOIU

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The aim of our study was to investigate explicit aggression in the context of open (wushu kungfu practitioners) and closed (athletics practitioners) skills. The study involved 38 athletes aged between 18 and 32, of whom: 14 athletes practicing athletics - 100 m sprint (male only), aged between 20 and 25, and 24 athletes practicing wushu kungfu (17 male and 7 female), aged between 18 and 32, of which 16 with international results and 8 with national/local results. Inclusion criterion - minimum 1 year of competitive experience (the average competitive experience was 8.34 years for wushu practitioners and 8 years for athletics practitioners). To assess explicit aggression the Romanian adaptation of the Sports Aggression Questionnaire (Makarowski et al., 2021) was used, with the subscales: Go-ahead, Foul play and Assertiveness. Using the t-test for two independent samples, we tested whether there are significant differences between wushu kungfu practitioners and track and field (100 m sprint) practitioners in terms of explicit aggression. Since p > 0.05, there are no significant differences between the two groups of athletes. The U-test was also used to investigate the differences among wushu kungfu practitioners by gender and competitive experience. A significant difference in Foul play by gender was noted. Male athletes are significantly more likely to break the rules to win compared to female athletes. On the other hand, no significant differences were found in explicit aggression according to athletes' competitive experience (in wushu kungfu practitioners).

**Keywords:** aggression, wushu kungfu, track and field.

### RISK-TAKING BEHAVIOR IN PREDICTING INJURY SEVERITY AMONG MARTIAL ARTS ATHLETES

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Combat sports and martial arts are part of the heuristic sport disciplines, requiring for athletes to make fast decisions and carry out appropriate technical-tactical actions in competitions and training, showing cold blood under stressful circumstances (Predoiu et al., 2018). Considering risk-taking behavior literature highlights instrumental and stimulating risk (Zaleśkiewicz, 2001). Instrumental risk is characterized by greater focus on possible losses, the person is reflexive, cognitive processes dominate, as well as reason in decision-making, while stimulating risk is characterized by impulsive, unconscious decision-making and emotional processes dominate. The aim of the research was to investigate the level of risk-taking behavior in athletes, and to verify if risk-taking behavior predict injury severity. One hundred and fifty-four senior athletes from striking combat sports, grappling combat sports, and mixed martial artists (MMA) participated in the study. For assessing risk-taking the Romanian adaptation of the Makarowski's Stimulating and Instrumental Risk Questionnaire was used. To verify whether there are significant differences in terms of stimulating and instrumental risk between athletes who have suffered mild, moderate and/or severe injuries and athletes who have suffered only minor/mild injuries, t-Test for Independent Samples was used. Binomial logistic regression procedure was performed, predicting athletes' likelihood of injury, based on risk-taking behavior. A higher level of instrumental risk was linked with a decreased likelihood of severe injuries in athletes. Martial arts athletes (in entire sample) who have suffered more severe injuries are more adrenaline-seeking in competition and use less rational thinking, taking more pleasure in just performing technical executions, regardless of the outcome.

**Keywords:** instrumental risk, martial arts, stimulating risk, injury severity.

### AN EXPERIENTIAL WAY, THE ROLE OF MUSIC AND RHYTHM IN THE DEVELOPMENT OF THE SPORTS TEAM COHESION

#### **Mpofo Kitata LUKIBADIKU (Acacia)**

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Rhythm is in everything we do. We walk to a rhythm, we run to a rhythm, we talk in rhythms, we teach in rhythms, we coach in the rhythm and train in the rhythm. Music and rhythm play a fascinating role in shaping team cohesion in sports. They create a shared experience that fosters unity. Rhythmic elements in music help athletes move in sync, improving teamwork and coordination. This is especially beneficial in sports requiring precise timing, like rowing or synchronized swimming. Music evokes emotions, and when teammates share a playlist or chant together, it strengthens their emotional connection, fostering a sense of belonging. Upbeat music can elevate mood and motivation, helping teams push through tough training sessions and competitions, in the same time it can lower stress levels and enhance focus, allowing athletes to perform at their best. Many teams use music to strengthen their cohesion and boost performance. Sports teams adopt specific songs or chants as part of their identity, reinforcing unity and pride. For example, Liverpool FC is famous for its anthem "You'll Never Walk Alone", which unites players and fans, creating a strong sense of belonging.

**Keywords:** music, rhythm, motivation, energy boost, team spirit.

## WHAT ATHLETES SAY ABOUT THEMSELVES: A QUALITATIVE INVESTIGATION INTO PSYCHOLOGICAL EXPERIENCES IN SPORT

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This qualitative research explores the inner world of athletes by analyzing how they talk about themselves, their struggles, and their identities in sport. The study aims to go beyond traditional models and statistics by capturing the lived psychological experience of athletes, through the lens of Interpretative Phenomenological Analysis (IPA). Ten participants (7 athletes, 2 coaches and 1 referee) from different sports (gymnastics, dance, rugby, tennis, swimming) were interviewed. Their stories revealed three major shared experiences: 1) Perfectionism and performance pressure, especially among those in aesthetic sports like gymnastics and dance, aligning with Frost's Cognitive-Behavioral Model; 2) Identity instability and loss, particularly during transitions out of sport, resonating with Stambulova's and Park's athletic career transition models; 3) Relational strain, such as miscommunication between athletes, coaches, and parents, echoing themes from Jowett's Coach-Athlete Relationship Model. Some sport-specific nuances also emerged. For example, rugby athletes emphasized team cohesion as a buffer against mental stress, while tennis players and swimmers highlighted solitude, overthinking, and cognitive overload in individual settings. Referees described the mental fatigue and performance anxiety that come with the invisibility of their role. The research integrates concepts from Self-Determination Theory, the Transactional Model of Stress and Coping, and Athlete Identity Theory, and concludes with several practical recommendations. These include autonomy-supportive coaching, tailored psychological support, narrative practices in therapy, and institutional frameworks that support athletes' mental health – particularly during transitions and injury recovery.

**Keywords:** athlete, mental health, sport psychology, identity and transition in athletes.

### INTEGRATING MINDFULNESS TECHNIQUES IN THE MENTAL PREPARATION OF PRETEEN BASKETBALL ATHLETES

#### **Adrian MOLDOVAN**

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The paper explores ways of integrating mindfulness techniques in the mental preparation of preteen athletes from a male basketball team. Although the general purpose of the program was orientated towards facilitating team cohesion before the start of the competitional season, a secondary objective relates to establishing a frame for future approaches focused on mindfulness, as an instrument for developing attentional and emotional regulation skills. In the context of a certain degree of reluctance towards mindfulness techniques being applicable to this age group, we focused on proposing a set of interventions meant to *friendly* involve the young athletes in exploring this type of practice and, additionally, connect them with key aspects of team cohesion. We approached this objective in group meetings, over a period of two months and, also, by introducing easy tasks for attending outside the group activity. In essence, we followed an effort without effort principle, in the sense of stimulating rhythm and consistency in experiencing small doses of mindfulness practice. One of the important inputs coming from the athletes suggests that there was a transition from perceiving mindfulness as an instrument for, primary, inducing relaxation to a more profound view of mindfulness as a way of relating with thoughts and behaviors. Athletes self-reports and parents' reports indicate that, for a few members of the group, the practice of mindfulness, at home and even before training, is still present after the program was concluded. Thus, there are positive behaviors related to mindfulness techniques, suggesting their further development in approaching preteen athletes.

**Keywords:** mindfulness techniques, preteen athletes, basketball, "effort without effort".

#### PSYCHOLOGICAL RESILIENCE IN OLYMPIC COMBAT SPORTS

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Most definitions for resilience include the following concepts: positive adaptation, rebound/bouncing back and maintenance of well-being - in face of adversity (Bryan et al., 2019). The aim of the study was to examine psychological resilience in Olympic combat sports, comparing gender and sports performance level. Moreover, we verified whether resilience predicts sports performance. Eighty-four combat sport athletes were involved in the study. Psychological resilience was assessed with the Romanian adaptation of the Brief Resilience Scale. First, using the Goodman and Kruskal tau association test a significant association was found between athletes' gender and the scoring on psychological resilience. Also, analysis of variance and Tukey post-hoc test highlighted significant differences between athletes' level (i.e. international, national, and regional/local results) (p = 0.02, respectively p < 0.01). In addition, a binomial logistic regression was performed, predicting athletes' likelihood to obtain higher sports performances based on psychological resilience. A slightly above average level of psychological resilience (generally) is linked with an increased likelihood of international and/or national performances in Olympic combat sports. On the other hand, athletes with lower caliber obtained the highest scores for resilience. We underline, also, that male athletes obtained higher scores for resilience than female athletes. The study offers a valuable window into understanding psychological resilience in combat sports.

**Keywords:** psychological resilience, combat sports, sports performance, caliber.

### PSYCHOLOGICAL PREDICTORS OF MOTIVATION IN ATHLETES

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Motivation plays a pivotal role in athletic development, performance consistency, and longterm sport engagement. Understanding its psychological predictors can guide targeted interventions and mental training programs for athletes. This research integrates multiple psychological domains to predict motivation more comprehensively. The aim of this study was to examine which psychological characteristics significantly predict sport-related motivation in athletes, using standardized psychophysiological and psychological instruments. The study included 168 athletes (aged 16–30, M = 19.42, SD = 3.44), representing various individual and team sports. The following instruments were used: Vienna Test System: DT-S1 (Stress Tolerance Test) and AHA (Attitudes toward Work Test); PSIS R-5-L (Psychological Skills Inventory for Sports Latvian version); LPI V3 (Latvian Personality Inventory). Pearson correlations were calculated between psychological and psychophysiological dimensions. A multiple linear regression was performed with Motivation as the dependent variable. Motivation showed statistically significant positive correlations with Extraversion (r = 0.322, p < 0.01), Visualization (r = 0.219, p < 0.01), and Team Emphasis (r = 0.234, p < 0.01), and a negative correlation with Impulsivity (r = -0.212, p < 0.01). A multiple regression model was statistically significant (F = 11.41, p < 0.001), explaining 22% of variance in motivation ( $R^2 = 0.219$ ). All four predictors were significant (p<0.05), with Extraversion having the strongest standardized effect ( $\beta = 0.279$ ). The findings highlight that personality traits and mental skills, particularly extraversion, visualization, team orientation, and low impulsivity, are meaningful predictors of motivation in athletes. These results can support coaches and sport psychologists in developing individualized psychological training plans to enhance motivation and performance. This research is funded under the Grant No. RSU/LSPA-PA-2024/1-0010.

**Keywords:** athletes, personality traits, motivation, psychological skills.



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