



SECTION 1 — Research Articles

1. A play-based sport psychology curriculum improves youth self-regulation: findings from a quasi-experimental study and a randomized controlled trial

Authors: Sean Tuohey, Brendan A. Rich, Marc Lochbaum, Val Acer, Leila Maulik, Isaiah Phillips

Journal: *Frontiers in Education*

Publication Date: 13 April 2026

DOI/URL: <https://doi.org/10.3389/feduc.2026.1739636>

Summary:

This study evaluated a play-based mental performance curriculum integrating breathwork, self-talk, and visualization into sport and movement activities. Across two controlled school-based studies with 277 youth participants, the intervention was tested against activity-matched control conditions. Outcomes included self-regulation skill use, anxiety, resilience, persistence, and transfer of skills beyond sport. The intervention improved daily mental-skill use, perceived control during athletic challenges, persistence under difficulty, and use of regulation skills at home. Middle-school participants also showed reduced anxiety and improved resilience. The findings support sport-based mental skills training as a scalable route for improving self-regulation under pressure.

2. Energy Availability as a Neurocognitive Regulator of Endurance Performance: Integrating Metabolic, Perceptual, and Decision-Making Mechanisms—A Narrative Review

Authors: Gerasimos V. Grivas, Walaa Jumah Alkawasbeh

Journal: *Sports*

Publication Date: 13 April 2026

DOI/URL: <https://doi.org/10.3390/sports14040150>

Summary:

This narrative review examined energy availability as a regulator of endurance performance through neurocognitive, perceptual, and decision-making mechanisms. The paper synthesised evidence linking low energy availability with impaired attention, altered effort perception, poorer self-regulation, and compromised pacing decisions. It framed endurance performance not only as a physiological output but also as a cognitive-control problem shaped by metabolic state. The authors argued that energy deficits may increase perceived exertion and reduce athletes' capacity to make adaptive decisions during prolonged exercise. The review highlights the need to integrate nutrition, cognition, and psychological regulation in endurance performance models.

3. The ToughPerson Index: Conceptualizing and Operationalizing Mental Toughness in Sport as a Social-Cognitive Personality Construct

Authors: Robert J. Harmison, Kyle Green, Matthew Best, Chris S. Hulleman

Journal: *Psychology of Sport and Exercise*

Publication Date: 9 April 2026

DOI/URL: <https://doi.org/10.1016/j.psychsport.2026.103133>

Summary:

This article advanced a social-cognitive personality framework for mental toughness in sport and introduced the ToughPerson Index as an operational measure. The authors argued that mental toughness should be understood as a pattern of psychological attributes, beliefs, self-regulatory tendencies, and context-sensitive responses rather than a fixed trait alone. The paper positioned mental toughness within performance-relevant demands such as pressure, persistence, confidence, and adaptive coping. It used the measure-development case to clarify how mental toughness can be assessed in a theoretically grounded way. The contribution is mainly conceptual and psychometric, offering a clearer basis for future intervention and measurement work.

4. Relationships Between Perceived Perfectionistic Climate, Perfectionism, Resilience, Fear of Failure, and Psychological Wellbeing in Youth Athletes

Authors: Emily J. Dargue-Fox, Sarah H. Mallinson-Howard, Laura C. Healy, Julie P. Johnston, Mustafa Sarkar

Journal: *Psychology of Sport and Exercise*

Publication Date: 9 April 2026

DOI/URL: <https://doi.org/10.1016/j.psychsport.2026.103131>

Summary:

This study examined how youth athletes' perceptions of a coach-created perfectionistic climate related to perfectionism, resilience, fear of failure, and psychological wellbeing. The authors tested pathways linking environmental demands with individual psychological characteristics and wellbeing outcomes. Findings indicated that perceived perfectionistic climate was associated with poorer psychological wellbeing and was meaningfully connected to perfectionism-related processes. The results suggest that climates emphasising flawless performance and mistake intolerance may undermine adaptive psychological functioning in youth sport. The study adds evidence that mental performance environments are shaped not only by individual traits but also by coach-created motivational climates.

5. A study on the influence of athletes' psychological safety on training persistence and its chain mediation mechanism

Authors: Xuedan Xu

Journal: *Frontiers in Psychology*

Publication Date: 22 April 2026

DOI/URL: <https://doi.org/10.3389/fpsyg.2026.1787593>

Summary:

This study tested whether psychological safety supports athletes' training persistence through reduced cognitive fatigue and increased training enjoyment. Questionnaire data were collected from 526 active athletes in China's competitive sport system, including university elite teams and provincial or municipal professional teams. Structural equation modelling showed that psychological safety was negatively associated with cognitive fatigue and positively associated with training enjoyment. Cognitive fatigue reduced both enjoyment and persistence, while enjoyment positively predicted persistence. The serial pathway from psychological safety to persistence through cognitive fatigue and enjoyment was supported. The findings frame persistence as a product of social climate, cognitive resource management, and affective experience rather than willpower alone.

6. Enhancing psychological performance and basketball skills: a comparative study of elite athletes and college recreational players after an 8-week mindfulness intervention

Authors: Qi-Fan Wu, Jia-Qi Du

Journal: *Frontiers in Psychology*

Publication Date: 22 April 2026

DOI/URL: <https://doi.org/10.3389/fpsyg.2026.1794656>

Summary:

This randomized intervention study examined an 8-week Mindfulness Acceptance Insight Commitment programme in basketball players. Sixty-seven participants, including elite athletes and college recreational players, were assigned to intervention or control conditions, with 63 completing the study. Measures included anxiety, depression, attention, resilience, and basketball skill tests. Elite athletes improved in anxiety, resilience, and obstacle-dribbling performance, with a trend for attention gains. Recreational players showed broader improvements across shooting, lay-up performance, anxiety, attention, and resilience. The study suggests mindfulness-based training may enhance both psychological performance and sport-specific skills, with effects differing by competitive level.

7. The relationship between intrinsic motivation and psychological wellbeing in combat sport athletes: the mediating role of mental toughness

Authors: Mehmet Duyan, F. Özoglu, G. Tekin, İ. Günel, T. Çelik, S. Reyhan, G. Ok, J. Chang

Journal: *Frontiers in Psychology*

Publication Date: April 2026

DOI/URL: <https://doi.org/10.3389/fpsyg.2026.1793186>

Summary:

This correlational study examined whether mental toughness mediated the relationship between intrinsic motivation and psychological wellbeing in combat sport athletes. The sample included 489 university combat sport athletes in Türkiye. Using structural equation modelling

and bootstrap mediation analyses, the authors found that intrinsic motivation positively predicted wellbeing and mental toughness. Mental toughness also positively predicted wellbeing and significantly mediated the motivation–wellbeing relationship. The findings support a model in which athletes’ enjoyment and internal reasons for participation strengthen coping capacity, which in turn supports wellbeing. The study connects self-determination theory with mental toughness research in combat sport contexts.

8. Integrative psychological interventions for stress regulation in sport: a mini-review

Authors: Walaa Jumah Alkawasbeh, Gerasimos V. Grivas, Adam Tawfiq Amawi

Journal: *Frontiers in Sports and Active Living*

Publication Date: 23 April 2026

DOI/URL: <https://doi.org/10.3389/fspor.2026.1798062>

Summary:

This mini-review synthesised psychological interventions for stress regulation in competitive sport. It compared cognitive-behavioural approaches, mindfulness- and acceptance-based interventions, and psychophysiological or technology-assisted strategies. The review concluded that psychological stress regulation is strongly linked to performance, wellbeing, emotional control, and attentional stability. Cognitive-behavioural strategies were presented as particularly useful for structured pre-competition preparation, while mindfulness approaches were linked to in-performance regulation. Psychophysiological and technology-assisted methods were discussed as promising tools for monitoring and recovery. The authors emphasised that no single intervention is universally optimal because effectiveness depends on athlete characteristics and sport demands.

9. Self-confidence and perceived fatigue as predictors of performance satisfaction in trained swimmers

Authors: Alejandro López-Hernández, Juan Ángel Simón-Piqueras, José María González Ravé

Journal: *Frontiers in Psychology*

Publication Date: 24 April 2026

DOI/URL: <https://doi.org/10.3389/fpsyg.2026.1755167>

Summary:

This study examined whether pre-competitive self-confidence and perceived fatigue predicted satisfaction and performance outcomes in trained youth swimmers. The sample included 147 national-level swimmers from Spain who competed in two major official events. Participants completed measures of somatic anxiety, cognitive anxiety, self-confidence, fatigue, and post-competition satisfaction. Self-confidence predicted lower perceived fatigue before competition, and both confidence and fatigue predicted satisfaction after competition. Anxiety did not uniquely predict satisfaction once confidence and fatigue were considered. Perceived fatigue was the strongest perceptual predictor of objective performance change, highlighting the role of fatigue appraisals in competitive swimming.

10. The Mediating Roles of the Challenge Appraisal in the Relationship Between the Coach–Athlete Relationship and Adolescent Athletes’ Burnout

Authors: Hunhyuk Choi, Sung-Ho Yoon

Journal: *Frontiers in Psychology*

Publication Date: 30 April 2026

DOI/URL: <https://doi.org/10.3389/fpsyg.2026.1770500>

Summary:

This study examined how challenge appraisal explains the link between coach–athlete relationship quality and burnout in adolescent athletes. A total of 323 adolescent athletes participated, and data were analysed using SPSS and AMOS with bootstrapped mediation testing. The coach–athlete relationship positively predicted challenge appraisal and negatively predicted burnout. Challenge appraisal also negatively predicted burnout and partially mediated the coach–athlete relationship–burnout association. The findings suggest that supportive coach relationships may reduce burnout partly by helping athletes interpret sport demands as challenges rather than threats. The study has direct relevance for pressure appraisal, motivation, and sustainable performance in youth sport.

11. Mapping qualitative research on motor imagery: A scoping review

Authors: Juliet M. Rowe, Theresa C. Gaughan, Shaun G. Boe

Journal: *PLOS ONE*

Publication Date: 29 April 2026

DOI/URL: <https://doi.org/10.1371/journal.pone.0348064>

Summary:

This scoping review mapped the use of qualitative methods in motor imagery research. The authors followed JBI methodology to examine how qualitative studies have explored imagery experiences, applications, and meanings. The review found that qualitative motor imagery research is heavily concentrated in sport psychology, particularly in work examining athletes' use of imagery. It also identified limited qualitative work in basic experimental learning contexts, despite those contexts often informing clinical and performance applications. The review highlights a methodological gap in understanding how people experience and apply imagery outside sport. For mental performance research, it reinforces the central role of athlete imagery work while calling for broader qualitative investigation.

12. Positive emotions and executive functions in female youth soccer: Implications for performance and health

Authors: Simon Knöbel, Franziska Lautenbach

Journal: *Performance Enhancement & Health*

Publication Date: April 2026

DOI/URL: <https://doi.org/10.1016/j.peh.2026.100435>

Summary:

This study examined associations between positive emotions and executive functions in female youth soccer players. The paper focused on cognitive functions relevant to performance, including attentional control, cognitive flexibility, and self-regulatory processing. It positioned positive emotional states as potentially important for both performance development and athlete health. The study contributes to sport cognition research by linking affective experience with executive-function capacities in a youth soccer context. Its practical relevance lies in showing that performance environments supporting positive emotion may also support cognitive functioning. The article extends mental performance research beyond anxiety and pressure toward positive affective mechanisms.

SECTION 2 — APA Reference List

Alkawasbeh, W. J., Grivas, G. V., & Amawi, A. T. (2026). Integrative psychological interventions for stress regulation in sport: A mini-review. *Frontiers in Sports and Active Living*, *8*, 1798062. <https://doi.org/10.3389/fspor.2026.1798062>

Choi, H., & Yoon, S.-H. (2026). The mediating roles of the challenge appraisal in the relationship between the coach–athlete relationship and adolescent athletes' burnout. *Frontiers in Psychology*, *17*, 1770500. <https://doi.org/10.3389/fpsyg.2026.1770500>

Dargue-Fox, E. J., Mallinson-Howard, S. H., Healy, L. C., Johnston, J. P., & Sarkar, M. (2026). Relationships between perceived perfectionistic climate, perfectionism, resilience, fear of failure, and psychological wellbeing in youth athletes. *Psychology of Sport and Exercise*, *85*, 103131. <https://doi.org/10.1016/j.psychsport.2026.103131>

Duyan, M., Özoglu, F., Tekin, G., Günel, İ., Çelik, T., Reyhan, S., Ok, G., & Chang, J. (2026). The relationship between intrinsic motivation and psychological wellbeing in combat sport athletes: The mediating role of mental toughness. *Frontiers in Psychology*, *17*, 1793186. <https://doi.org/10.3389/fpsyg.2026.1793186>

Grivas, G. V., & Alkawasbeh, W. J. (2026). Energy availability as a neurocognitive regulator of endurance performance: Integrating metabolic, perceptual, and decision-making mechanisms—A narrative review. *Sports*, *14*(4), 150. <https://doi.org/10.3390/sports14040150>

Harmison, R. J., Green, K., Best, M., & Hulleman, C. S. (2026). The ToughPerson Index: Conceptualizing and operationalizing mental toughness in sport as a social-cognitive personality construct. *Psychology of Sport and Exercise*, *85*, 103133. <https://doi.org/10.1016/j.psychsport.2026.103133>

Knöbel, S., & Lautenbach, F. (2026). Positive emotions and executive functions in female youth soccer: Implications for performance and health. *Performance Enhancement & Health*, *14*(3), 100435. <https://doi.org/10.1016/j.peh.2026.100435>

López-Hernández, A., Simón-Piqueras, J. Á., & González Ravé, J. M. (2026). Self-confidence and perceived fatigue as predictors of performance satisfaction in trained swimmers. *Frontiers in Psychology*, *17*, 1755167. <https://doi.org/10.3389/fpsyg.2026.1755167>

Rowe, J. M., Gaughan, T. C., & Boe, S. G. (2026). Mapping qualitative research on motor imagery: A scoping review. *PLOS ONE*, *21*(4), e0348064. <https://doi.org/10.1371/journal.pone.0348064>

Tuohey, S., Rich, B. A., Lochbaum, M., Acer, V., Maulik, L., & Phillips, I. (2026). A play-based sport psychology curriculum improves youth self-regulation: Findings from a quasi-experimental study and a randomized controlled trial. *Frontiers in Education*, *11*, 1739636. <https://doi.org/10.3389/feduc.2026.1739636>

Wu, Q.-F., & Du, J.-Q. (2026). Enhancing psychological performance and basketball skills: A comparative study of elite athletes and college recreational players after an 8-week mindfulness intervention. *Frontiers in Psychology*, *17*, 1794656. <https://doi.org/10.3389/fpsyg.2026.1794656>

Xu, X. (2026). A study on the influence of athletes' psychological safety on training persistence and its chain mediation mechanism. *Frontiers in Psychology*, *17*, 1787593. <https://doi.org/10.3389/fpsyg.2026.1787593>