PSYCHOLOGICAL AND NEUROPHYSIOLOGICAL INTERVENTIONS IN INJURY PREVENTION FOR ELITE ATHLETES

INTERVENÇÕES PSICOLÓGICAS E NEUROFISIOLÓGICAS NA PREVENÇÃO DE LESÕES EM ATLETAS DE ALTO RENDIMENTO

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Abstract
This article aims to synthesize evidence on psychological and neurophysiological interventions in injury prevention among high-performance athletes. Prevention is essential to maintain athletic performance and prolong athletes' careers, considering the physical and emotional impact of injuries. The methodology used was an integrative literature review, selecting relevant national and international studies that address prevention strategies based on mental and neurophysiological factors. Searches were conducted in specialized databases, with critical data analysis and synthesis of results. Findings indicate that interventions such as stress control, anxiety management, mindfulness training, and neuromodulation techniques contribute to reducing injury risk. The integrated mind-body approach enhances adaptation to physical stress and resilience in competitive settings. The discussion highlights the need to expand multidisciplinary practices that consider psychological and neurophysiological factors, moving beyond exclusive focus on biomechanical aspects. Longitudinal studies are recommended to evaluate the effectiveness of these interventions across various sports. It is concluded that injury prevention should be understood as a multifactorial process, where psychological and neurophysiological strategies are fundamental to optimizing athletes' health and performance.
Keywords: Injury prevention; Sport psychology; Neurophysiological interventions; High-performance athletes; Integrative review.

Resumo
Este artigo tem como objetivo sintetizar evidências sobre intervenções psicológicas e neurofisiológicas na prevenção de lesões em atletas de alto rendimento. A prevenção é essencial para manter o desempenho esportivo e prolongar a carreira desses atletas, considerando o impacto físico e emocional das lesões. A metodologia utilizada foi a revisão integrativa da literatura, com seleção de estudos nacionais e internacionais relevantes que abordam estratégias de prevenção baseadas em aspectos mentais e neurofisiológicos. Foram realizadas buscas em bases especializadas, análise crítica dos dados e síntese dos resultados. Os achados apontam que intervenções como controle do estresse, manejo da ansiedade, treinamento em atenção plena e técnicas de neuromodulação contribuem para a redução do risco de lesões. A abordagem integrada corpo-mente favorece a adaptação ao estresse físico e a resiliência diante dos desafios competitivos.
A discussão ressalta a necessidade de ampliar práticas multidisciplinares que considerem fatores psicológicos e neurofisiológicos, superando o foco exclusivo nos aspectos biomecânicos. Estudos longitudinais são recomendados para avaliar a eficácia dessas intervenções em diferentes esportes. Conclui-se que a prevenção de

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lesões deve ser compreendida como um processo multifatorial, onde estratégias psicológicas e neurofisiológicas são fundamentais para otimizar a saúde e o desempenho dos atletas.
Palavras-chave: Prevenção de lesões; Psicologia do esporte; Intervenções neurofisiológicas; Atletas de alto rendimento; Revisão integrativa.

1 INTRODUCTION

High-performance sport is characterized by a set of complex demands that involve not only the continuous improvement of physical, technical, and tactical capabilities but also the psychological capacity of athletes to deal with high-pressure situations. These athletes are constantly exposed to competitive environments, elevated performance goals, and external expectations that include fans, sponsors, and the technical team itself. Such a context requires that preparation for high performance be multidimensional, involving physical, emotional, cognitive, and social components.

Systematic preparation in elite sport presupposes an intense and continuous investment in training aimed at excellence in all aspects of performance. However, this pursuit of maximum results often disregards the adaptive limits of the human body and mind. As Samulski (2009) highlights, high-performance sport transcends the logic of healthy practice, requiring technical and scientific interventions that minimize risks to the athlete's integrity.

In this scenario, Sport Psychology emerges as a fundamental field to promote the mental balance of athletes, contributing to both performance and mental health. According to Rubio (2005), aspects such as motivation, concentration, confidence, and emotional control are decisive for sports performance, and their development must be integrated into physical training from grassroots categories.

Furthermore, high-level sport is a field where reaction time, decision-making under pressure, and stress management directly influence the outcome. This implies that the athlete's psychological functioning must be seen as essential as their physical preparation. Ignoring this dimension can compromise both performance and career longevity.

Thus, it becomes evident that the technical staff, health professionals, and sports managers need to understand the athlete as a biopsychosocial being, whose performance results from the interaction between multiple factors. This understanding

opens space for more effective interdisciplinary action, aimed not only at performance but also at the prevention of illnesses and injuries.

2 DEVELOPMENT

2.1 High incidence of injuries and their implications for athletes' careers

Sports injuries represent one of the biggest obstacles faced by high-performance athletes, being responsible for prolonged absences, loss of professional opportunities, and, in extreme cases, premature career termination. According to Oliveira (2016), athletes in modalities such as football, basketball, and athletics show high rates of musculoskeletal injuries, especially during periods of high competitive load.

The impact of injuries goes beyond the physical sphere, affecting the athlete's self-confidence, sense of identity, and social ties with their team and fans. The disruption of the training and competition routine can generate feelings of helplessness, frustration, and isolation. As Nunes *et al.* (2010) highlight, experiencing an injury can trigger depressive symptoms, anxiety, and reduced self-esteem, negatively affecting the recovery process.

In many cases, injury recurrence is associated with pressure to return to competition quickly, often without the athlete having achieved full physical and emotional recovery. This premature return can lead to a vicious cycle of injuries, insecurity, and performance decline, compromising not only performance but also the athlete's confidence in themselves and in the professionals who support them.

Although physical preparation and conditioning are a constant focus in prevention programs, it is necessary to recognize that the risk of injury is also associated with emotional factors, such as competitive stress, mental overload, and affective instability. In this context, psychology can act not only in rehabilitation but also in anticipating emotional states that favor the occurrence of injuries.

Injury prevention, therefore, must be seen as a dynamic and continuous process that requires individualized monitoring, dialogue among different areas of the multidisciplinary team, and sensitivity to perceive early signs of overload both physical and mental. A comprehensive care model contributes to the sustainability of the athlete's career and the maintenance of their overall health.

2.2 Psychological and neurophysiological factors as predictors of injury

Scientific evidence indicates that psychological variables such as stress, anxiety, low self-esteem, attention deficit, and difficulties in emotional self-regulation play a significant role in predisposing individuals to injuries. These variables can alter risk perception, affect motor coordination, and generate muscle tension, increasing the risk of accidents during sports practice (Rubio, 2005).

One of the most cited theoretical models on the subject is that of Andersen and Williams (1988), which proposes that elevated psychological stress influences vulnerability to injury through physiological mechanisms (such as increased muscle tension and altered attention) and behavioral mechanisms (such as impulsivity and execution errors). This model has been used by Brazilian researchers as a basis for investigating preventive interventions in the sports context (Andrade *et al.*, 2016).

In addition to emotional factors, there is growing interest in neurophysiological variables as indicators of injury risk. Parameters such as heart rate variability (HRV), salivary cortisol levels, and sleep quality have been used as markers of an athlete's recovery state, helping to detect conditions of chronic stress or uncompensated fatigue (Silva; Fonseca, 2021).

HRV, for example, is related to the functioning of the autonomic nervous system and the body's ability to adapt to stress. Persistent reductions in this variable can indicate overload and an increased risk of injury. Monitoring this data allows health professionals to adjust training volume and implement individualized recovery strategies.

Such evidence reinforces the need to understand the relationship between mental and physiological factors in an integrated manner, promoting preventive interventions that consider the uniqueness of each athlete and the variables that influence their psychophysical balance.

2.3 Predominance of biomechanical studies over psychobiological ones

Despite the relevance of psychobiological factors, scientific literature and sports practice are still dominated by approaches centered on biomechanical and physiological aspects of injury prevention. Most prevention programs focus on

strength, mobility, and proprioception exercises, leaving interventions aimed at emotional and neuroendocrine monitoring of athletes in the background (Barbosa, 2023).

This gap is also evident in academic training and club routines, which often do not effectively integrate psychologists, neuroscientists, and other mental health professionals into prevention centers. As a consequence, the detection of emotional risks is often done late, usually only after injuries or episodes of psychological distress have occurred.

The undervaluation of psychobiological factors is further reflected in the scarcity of longitudinal studies investigating the effectiveness of integrated interventions in injury prevention. Studies addressing, for example, the combined effects of neuromuscular training and brief psychotherapy focused on emotional regulation on injury risk are rare.

As Silveira and Galdino (2022) observe, there is still an underexplored field between sport psychology and sports medicine, which needs to be strengthened by interdisciplinary research and more comprehensive clinical protocols. The absence of official guidelines on the topic also hinders its consolidation in the daily practice of clubs and training centers.

Breaking with this fragmentation requires a paradigm shift that recognizes the complexity of the human body and the interaction between multiple dimensions of health. Integrating psychological and neurophysiological data into monitoring systems can be a decisive step in this direction.

2.4 Importance of the integrative mind-body approach in injury prevention

The mind-body approach proposes that sports performance and health should be understood as products of the interaction between physiological, neurological, psychological, and social systems. Thus, preventing injuries is not just about strengthening muscles or improving movement patterns, but also about promoting emotional balance, restorative sleep, and resilience to competitive stress.

Studies adopting this perspective show that combined interventions, such as breathing training, biofeedback, psychological counseling, and training load control based on neurophysiological indicators, are more effective in reducing the number and severity of injuries (Souza *et al*., 2023).

This approach also favors the athlete's adherence to preventive strategies, as they begin to understand the importance of taking care of their own health holistically. This contributes to their autonomy, self-awareness, and responsibility for the training and recovery process.

Given this overview, the present article aims to synthesize scientific evidence on psychological and neurophysiological interventions in injury prevention in high-performance athletes, through an integrative literature review. It is expected, thereby, to contribute to the advancement of scientific knowledge and to the implementation of more effective and sustainable practices in the context of high-performance sports.

3 METHOD

This study is characterized as an integrative literature review, a method that allows for the systematic and ordered synthesis of results from previous research on a specific topic, enabling a theoretical and practical deepening of the investigated theme (Mendes; Silveira; Galvão, 2008).

The integrative review was chosen for its ability to encompass different types of methodological studies (quantitative and qualitative), allowing for a broad analysis of available evidence on psychological and neurophysiological interventions in injury prevention in high-performance athletes.

The review construction process followed six steps proposed by Mendes, Silveira, and Galvão (2008): (1) elaboration of the guiding question, (2) definition of inclusion and exclusion criteria, (3) identification of studies in databases, (4) evaluation of study quality, (5) data extraction, and (6) analysis and presentation of results.

The guiding question for this review was: “What scientific evidence exists on psychological and neurophysiological interventions in injury prevention in high-performance athletes?”

For the selection of studies, the following inclusion criteria were defined: (a) full articles, (b) published between 2004 and 2024, (c) in Portuguese, English, or Spanish, (d) freely available in databases, and (e) addressing interventions with a psychological and/or neurophysiological focus aimed at preventing injuries in high-performance athletes, regardless of the sports modality.

Exclusion criteria were: (a) studies that exclusively addressed post-injury rehabilitation without a preventive focus, (b) articles dealing with recreational or

amateur athletes, (c) abstracts, editorials, narrative reviews, and duplicate works in more than one database.

The search was conducted between May and June 2025 in the following electronic databases: PubMed, Scopus, Web of Science, PsycINFO, ResearchGate, SPORTDiscus, and SciELO. In addition, a manual search was performed in the references of selected articles to identify possible additional relevant studies.

The controlled descriptors used were based on Health Sciences Descriptors (DeCS) and Medical Subject Headings (MeSH): “Athletes”, “Sports Injuries”, “Injury Prevention”, “Psychological Intervention”, “Neurophysiological Intervention”, “High Performance Sport”, “Psychology”, “Stress”, “Mental Health”, “Sport Psychology”. Combinations with Boolean operators (AND, OR) were also used.

The screening of articles was carried out in three stages: reading titles, reading abstracts, and full reading of selected texts. This screening was performed solely by the author of this work.

To assess the methodological quality of the studies, validated instruments such as STROBE (for observational studies), CONSORT (for clinical trials), and COREQ (for qualitative research) were used. Each article was classified according to scientific rigor, clarity of methods, and applicability of results.

Data analysis was performed through thematic synthesis of the content, grouping studies into main axes: (a) psychological interventions, (b) neurophysiological interventions, (c) integrated mind-body approaches, and (d) gaps in evidence. The results were discussed in light of the theoretical framework of Sport Psychology and Psychobiology.

4 RESULTS AND DISCUSSION

The analysis of the selected studies allowed for the identification of different intervention strategies aimed at preventing injuries in high-performance athletes, with emphasis on those that address psychological, neurophysiological dimensions, or integrate both. Evidence suggests that the risk of injury is not exclusively a result of physical or biomechanical factors, but also involves mental, perceptual, and adaptive aspects of the central nervous system. The interrelationship between body and mind has been increasingly recognized as a determinant in the athlete's vulnerability or protection in contexts of high competitive demand. Given this, the results were

organized into four thematic axes that synthesize the most recurrent approaches in the analyzed literature: (a) psychological interventions, (b) neurophysiological interventions, (c) integrated mind-body approaches, and (d) gaps in scientific evidence.

4.1 Psychological interventions in injury prevention

The analyzed studies reveal that psychological variables such as intense stress, high anxiety, low emotional self-regulation, and lack of effective coping are associated with a higher incidence of injuries in high-performance athletes (Noce *et al.,* 2008; Coimbra et al., 2013). The literature emphasizes that psychological prevention should not be restricted to post-injury, but needs to be integrated into the athlete's continuous training.

Among preventive psychological interventions, psychological skills training (PST), focusing on stress control, attention, confidence, and motivation, stands out, as does the use of motor imagery and visualization to reinforce positive technical and emotional patterns. Within this field, mindfulness training (MT) has gained prominence, as presented by Sousa, Pierro, and Calais (2023), who concluded that MT can promote sports performance and psychological skills in athletes after analyzing different studies and variables.

Psychoeducation also proved effective in increasing athletes' body and emotional awareness. Group interventions conducted by sport psychologists with grassroots athletes demonstrated that living with peers, coaches, opponents, teachers, and other professionals, as well as learning social, cognitive, and emotional competencies and planning daily training activities, for example, can be understood as protective factors (Lindern *et al.,* 2021).

4.2 Neurophysiological interventions in injury prevention

In the field of neurophysiology, an increasing number of studies have investigated the relationship between neural fatigue, central motor control, and injury risk, highlighting compromised motor cortex mechanisms and efferent pathways (Gomes; Lopes; Marchetti, 2016). Evidence suggests that alterations in cortical

excitability and sensorimotor integration can precede injurious episodes, especially in modalities with high neuromuscular demand such as athletics and gymnastics.

Interventions such as electromyographic biofeedback, proprioceptive training with neurosensory stimuli, and transcranial direct current stimulation (tDCS) have been explored as preventive strategies. According to a study by Ianni (2017), the use of tDCS in volleyball athletes improved both cognitive and sports performance. The reduction in reaction time and accuracy cost can facilitate cognitive processing, thereby enhancing sports performance.

Approaches based on applied neuroscience in sport are still nascent in Brazil but show promising potential, especially when integrated into technical-tactical training. The synergy between neuroplasticity, functional training, and body self-awareness is seen as an emerging field for preventing overuse injuries, but in light of this, Cardoso et al. (2024) state that advances in understanding the neurobiological mechanisms of neuroplasticity and in the development of new therapeutic technologies have the potential to revolutionize the treatment of neurological injuries and significantly improve patients' functional outcomes and quality of life.

4.3 Integrated mind-body approaches

The integration of psychological and neurophysiological factors has proven more effective than isolated approaches. Injury prevention programs with a mind-body approach combine mindfulness exercises, breath control, mental visualization, and neuromotor training, with effects proven by Freire (2019). This combination promotes autonomic regulation, improves attentional focus, and reduces the risk of injurious motor errors.

There is still insufficient evidence to determine the magnitude of the effects of these interventions due to methodological limitations of the studies (Gross *et al*., 2016). According to Carraça *et al*. (2018), mindfulness-based interventions, such as the Mindfulness-Acceptance-Commitment-Based Approach (MAC) and Mindfulness Sport Performance Enhancement (MSPE) programs, have demonstrated effectiveness in improving the sports performance of elite athletes. They also increase levels of mindfulness, concentration, acceptance, sense of control, awareness of bodily sensations, and decrease levels of stress and anxiety (Bernier *et al.*, 2014; Bertollo *et al*., 2009; Gross *et al.,* 2016; Haase *et al*., 2015).

Evidence suggests that athletes with greater body perception and emotional control exhibit a lower propensity for motor impulsivity and greater neuropsychological adaptation capacities to competitive stress. Such factors favor the alignment between physiological response and conscious action, preventing injurious motor patterns.

4.4 Gaps in scientific evidence

Despite advances, studies with robust experimental designs evaluating integrated interventions in high-performance sports contexts are still scarce. Many studies present methodological limitations, such as small samples, absence of control groups, or lack of longitudinal follow-up (Mendes; Almeida, 2022).

The predominance of studies with a biomechanical and physiological focus, to the detriment of psychobiological approaches, highlights a significant gap in the literature. It is still common for sport psychologists and neuroscientists to work in isolation, whereas the complexity of the injury phenomenon demands interdisciplinarity (Januário; Magalhães; Ferreira Filho, 2023).

Furthermore, studies conducted with Brazilian athletes are rare, especially in modalities with a high incidence of injuries, such as football, gymnastics, MMA, and athletics. This points to the need to encourage national scientific production and the practical application of evidence-based interventions in training centers and clubs.

5 FINAL CONSIDERATIONS

This integrative review highlighted the complexity of the injury prevention process in high-performance athletes, emphasizing the importance of psychological and neurophysiological interventions. It was observed that, despite the historical predominance of biomechanical studies, approaches that consider mental and neurophysiological aspects have proven promising for reducing injury risk, especially when integrated into mind-body programs. Strategies such as psychological skills training, stress control, biofeedback, neuromotor stimulation, and mindfulness practices provide evidence pointing to the effectiveness of multidimensional prevention.

However, important gaps in the literature are evident, such as the scarcity of controlled experimental studies, limited national scientific production, and the lack of

longitudinal research evaluating the long-term effects of these interventions. Furthermore, interdisciplinary integration among psychologists, neuroscientists, physiotherapists, and coaches is still incipient, limiting the full potential of these practices.

Thus, it is recommended that future research invest in rigorous methodological designs, expand samples, and include sports modalities with a high incidence of injuries. It is also fundamental to foster studies conducted in the Brazilian context, considering the cultural, organizational, and structural specificities of national high-performance environments. Finally, the practical implementation and continuous evaluation of integrated mind-body programs should be encouraged in training centers, aiming to improve athletes' health and performance.

REFERENCES

ANDRADE, M. L. et al. Estresse e lesões em atletas de alto rendimento: uma revisão sistemática. **Revista Brasileira de Psicologia do Esporte**, v. 8, n. 2, p. 123-136, 2020. Disponível em: https://www.scielo.br/j/rbpe. Acesso em 16 maio 2025.

BARBOSA, W. M. A. **Estratégias de coping na recuperação de lesões no futebol de alto rendimento**. 2023. Trabalho de Conclusão de Curso (Bacharelado em Educação Física) – Universidade Federal de Pernambuco, Recife, 2023. Disponível em: https://repositorio.ufpe.br/handle/123456789/50805. Acesso em 16 maio 2025.

BERNIER, M. et al. Effects and Underlying Processes of a Mindfulness-Based Intervention With Young Elite Figure Skaters: two case studies. **The Sport Psychologist,** [S.L.], v. 28, n. 3, p. 302-315, set. 2014. Human Kinetics. Disponível em: https://doi.org/10.1123/tsp.2013-0006. Acesso em 20 maio 2025.

BERTOLLO, M.; SALTARELLI, B.; ROBAZZA, C. Mental preparation strategies of elite modern pentathletes. **Psychology Of Sport And Exercise**, [S.L.], v. 10, n. 2, p. 244-254, fev. 2009. Disponível em: https://doi.org/10.1016/j.psychsport.2008.09.003. Acesso em 20 maio 2025.

CARDOSO, T. P. et al. Neuroplasticidade e recuperação funcional: novas abordagens no tratamento de lesões neurológicas. **Revista Ibero-Americana de Humanidades, Ciências e Educação,** [S.L.], v. 10, n. 1, p. 1005-1013, 15 fev. 2024. Revista Ibero-Americana de Humanidades, Ciências e Educação. Disponível em: https://doi.org/10.51891/rease.v10i1.13017. Acesso em 29 maio 2025.

COIMBRA, D.R. et al. Habilidades psicológicas de coping em atletas brasileiros. Motricidade. **Vila Real**, v. 9, n. 1, p. 94-105, abr. 2013. Disponível em: https://www.redalyc.org/pdf/2730/273025808008.pdf. Acesso em 5 jun. 2025.

FREIRE, L. A. O. de L. **Influência da meditação mindfulness na prevenção e reabilitação de lesões: uma revisão narrativa**. 2019. 21 f. Monografia (Especialização) - Curso de Especialização em Avanços Clínicos em Fisioterapia, Eeffto - Escola de Educação Física, Fisioterapia e Terapia Ocupacional, Universidade Federal de Minas Gerais, Belo Horizonte, 2019. Disponível em: https://repositorio.ufmg.br/handle/1843/31599. Acesso em 3 jun. 2025.

GOMES, W. A.; LOPES, C. R.; MARCHETTI, P. H. Fadiga central e periférica: uma breve revisão sobre os efeitos locais e não locais no sistema neuromuscular. **Revista CPAQV - Centro de Pesquisas Avançadas em Qualidade de Vida**, [S. l.], v. 8, n. 1, 2016. DOI: 10.36692/106. Disponível em: https://revista.cpaqv.org/index.php/CPAQV/article/view/106. Acesso em 26 maio. 2025.

GROSS, M. et al. An empirical examination comparing the Mindfulness-Acceptance-Commitment approach and Psychological Skills Training for the mental health and sport performance of female student athletes. **International Journal Of Sport And Exercise Psychology**, [S.L.], v. 16, n. 4, p. 431-451, 3 nov. 2016. Disponível em: https://doi.org/10.1080/1612197X.2016.1250802. Acesso em 20 maio 2025.

HAASE, L. et al. A pilot study investigating changes in neural processing after mindfulness training in elite athletes. **Frontiers In Behavioral Neuroscience**, [S.L.], v. 9, p. 1-12, 27 ago. 2015. Disponível em: https://doi.org/10.3389/fnbeh.2015.00229. Acesso em 20 maio 2025.

JANUÁRIO, M. S.; MAGALHÃES, I. C.; FERREIRA FILHO, D. A. A contribuição da psicologia esportiva para o sucesso de atletas de alto rendimento. **Rev. Ibero-Amer. Humanid. Ciênc. Educ**., v. 9, n. 4, p. 9167–9173, 2023. Disponível em: https://periodicorease.pro.br/rease/article/view/9634. Acesso em 16 maio 2025.

IANNI, R. M. **Efeitos da estimulação transcraniana por corrente contínua no desempenho cognitivo de atletas de voleibol.** 2017. 65 f. Dissertação (Doutorado) - Curso de Ciências, Departamento de Psiquiatria e Psicologia Médica, Universidade Federal de São Paulo, São Paulo, 2017. Disponível em:https://repositorio.unifesp.br/items/ef71106a-3c65-44e3-86b5-9c1d0c0d778f. Acesso em 20 maio de 2025

LIMA, D. R. **Treinamento funcional na prevenção de lesões de atletas de alto rendimento: revisão integrativa**. 2022. Trabalho de Conclusão de Curso (Fisioterapia) – PUC Goiás, Goiânia, 2022. Disponível em: https://repositorio.pucgoias.edu.br/jspui/handle/123456789/4021. Acesso em 16 maio 2025.

LINDERN, D et al. Impacto de uma intervenção psicológica para atletas de futebol de categorias de base. **Contextos Clínicos,** [S.L.], v. 10, n. 1, p. 60-73, 13 jul. 2017. UNISINOS - Universidade do Vale do Rio Dos Sinos. Disponível em: https://doi.org/10.4013/ctc.2017.101.05. Acesso em 05 jun. 2025.

MEDEIROS, C. Lesão e dor no atleta de alto rendimento: o desafio do trabalho da psicologia do esporte. **Psicol. Rev**., v. 25, n. 2, p. 355–370, 2016. Disponível em:

https://revistas.pucsp.br/index.php/psicorevista/article/view/26235. Acesso em 16 maio 2025.

MENDES, K. D.; SILVEIRA, R. C.; GALVÃO, C. M. Revisão integrativa: método de pesquisa para a incorporação de evidências na saúde e na enfermagem. **Texto Contexto Enferm**., v. 17, n. 4, p. 758-764, 2008. Disponível em: http://dx.doi.org/10.1590/s0104-07072008000400018. Acesso em 23 maio 2025.

NOCE, F.; SAMULSKI, D. M.; MELLO, M. T. Psicologia do esporte e psicobiologia no esporte de alto rendimento e na reabilitação. In: Cohen M (org.). **Medicina do esporte. Barueri: Manole**, 2008:143-52. Disponível em: https://www.researchgate.net/profile/Franco-Noce-/publication/360225740_Psicologia_do_Esporte_e_Psicobiologia_no_Esporte_de_Alto_Rendimento_e_na_Reabilitacao/links/62697cea2e2cf87c34828b38/Psicologia-do-Esporte-e-Psicobiologia-no-Esporte-de-Alto-Rendimento-e-na-Reabilitacao.pdf. Acesso em 5 jun. 2025.

OLIVEIRA, B. F. **O papel da psicologia do esporte na prevenção e reabilitação de lesões esportivas**. 2016. Trabalho de Conclusão de Curso (Educação Física) – UNESP, São Paulo, 2016. Disponível em: https://repositorio.unesp.br/items/6c691c89-bcb2-4bcf-8acb-1f6f94774d39. Acesso em 16 maio 2025.

SOUSA, B. A. de; PIERRO, C. di.; CALAIS, S. L. Efeitos do treinamento de mindfulness no desempenho esportivo e nas habilidades psicológicas de atletas: revisão sistemática. **Psicologia Argumento**, [S.L.], v. 41, n. 112, p. 2999-3026, 7 mar. 2023. Pontificia Universidade Catolica do Parana - PUCPR. http://dx.doi.org/10.7213/psicolargum.41.112.ao14. Disponível em: https://periodicos.pucpr.br/psicologiaargumento/article/view/29707. Acesso em 7 jun. 2025.

VESPA DI CIOMMO, A.; FISCARELLI VILAR, B. B.; SALGADO DOS SANTOS DA CRUZ, L. **A influência da psicologia esportiva na saúde mental de atletas de alto rendimento**. 2023. Trabalho de Conclusão de Curso (Psicologia) – UNIP, São Paulo, 2023. Disponível em: https://repositorio.unip.br/graduacao-repositorio/a-influencia-da-psicologia-esportiva-na-saude-mental-de-atletas-de-alto-rendimento/. Acesso em 16 maio 2025.