

Review

Psychological Well-being in Athletes: A Systematic Review of Mental Health Strategies

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Abstract: This study aimed to synthesize existing literature on the intricate relationship between sport and mental health, focusing on psychological factors and interventions designed to support athletes' mental well-being. A systematic literature review (SLR) methodology was employed to provide a comprehensive overview of the field. The review included a total of 10 articles, selected through a rigorous process following the PRISMA guidelines. Data was extracted from the Scopus database using predetermined keywords related to sport and mental health. The initial search yielded a large number of papers, which were then carefully screened based on inclusion and exclusion criteria. Studies were excluded if they were not peer-reviewed, were not written in English, or did not directly address the psychological aspects of athletes' mental health. Findings revealed several key themes, including the prevalence of mental health challenges among athletes, the effectiveness of various psychological interventions, and the influence of environmental factors on mental well-being. Future research should focus on longitudinal studies to examine the long-term effects of interventions and explore culturally tailored approaches to mental health support in sport.

Keywords: Shooting, Petanque, Extracurricular

1. Introduction

Athletes, renowned for their physical prowess and dedication to peak performance, often face immense pressure both on and off the field, rendering them susceptible to a range of mental health challenges (Coppel, 2020; Currie & Purcell, 2021). The rigorous demands of training, competition, and the constant scrutiny from the public can take a toll on their psychological well-being (Edwards, 2024; Esfandiari et al., 2011). This vulnerability underscores the critical need to understand and address the mental health of athletes, ensuring they receive the support and resources necessary to thrive both in their athletic careers and personal lives (Lundqvist et al., 2024; Peters & LoBue, 2024; Philipp & Katharina, 2021). Sport psychology and psychiatry, as specialized fields, contribute significantly to the mental health of athletes by providing frameworks for understanding psychological stressors and implementing effective interventions (Jasser et al., 2022; Llewellyn et al., 2020).

The interplay between sport and mental health is multifaceted, involving various psychological factors such as stress, anxiety, depression, burnout, and eating disorders (Currie & Purcell, 2021; Edwards, 2024; Gleser & Mendelberg, 1990). These conditions can impair athletic performance, diminish overall quality of life, and potentially lead to long-term mental health issues if left unaddressed (Esfandiari et al., 2011; Llewellyn et al., 2020). Therefore, it is imperative to recognize the importance

of mental health in sport and to prioritize the development and implementation of comprehensive support systems (Jasser et al., 2022; Lundqvist et al., 2024). Such systems should encompass preventative measures, early detection strategies, and effective interventions tailored to the unique needs of athletes (Peters & LoBue, 2024; Philipp & Katharina, 2021).

Recent research has highlighted the growing recognition of mental health issues in sport, leading to increased efforts to promote mental well-being and provide support for athletes (Hadi et al., 2025; Lufthansa et al., 2024; Risma et al., 2024; Syahrastani et al., 2025). Psychological interventions, such as cognitive-behavioral therapy (CBT), mindfulness training, and stress management techniques, have shown promise in improving athletes' mental health and performance (Abdillah et al., 2025; Bafirman, Wahyuri, et al., 2023; Hadi et al., 2025; Lufthansa et al., 2024; Munir et al., 2024; Risma et al., 2024; Syahrastani et al., 2025; Wijaya et al., 2024). Additionally, the role of social support from coaches, teammates, and family members has been identified as a crucial factor in fostering resilience and promoting mental well-being among athletes (Llewellyn et al., 2020; Lundqvist et al., 2024). These findings emphasize the importance of a holistic approach that considers both individual and environmental factors in addressing mental health in sport (Abdillah et al., 2025; Nia et al., 2025).

The current trend in sport psychology and psychiatry involves integrating mental health services into athletic programs and creating a culture of openness and acceptance around mental health issues (Haryanto et al., 2024; Risma et al., 2025). Educational initiatives aimed at raising awareness and reducing stigma are essential components of this approach (Currie & Purcell, 2021; Esfandiari et al., 2011). Furthermore, there is a growing emphasis on early intervention and preventative strategies to mitigate the risk of mental health problems in athletes (Jasser et al., 2022; Llewellyn et al., 2020). This proactive approach aims to equip athletes with the skills and resources needed to manage stress, cope with adversity, and maintain their mental well-being throughout their careers (Lundqvist et al., 2024; Peters & LoBue, 2024).

Despite the increasing attention given to mental health in sport, several research problems persist, including the lack of comprehensive systematic reviews that synthesize the existing literature on psychological factors and interventions (Nikmatullaili et al., 2025; Padli et al., 2024). While individual studies and narrative reviews have provided valuable insights, a systematic approach is needed to critically evaluate and integrate the evidence base (Bafirman et al., 2025; Munir et al., 2025). This systematic review aims to address this gap by providing a comprehensive overview of the psychological aspects of athletes' mental health and the effectiveness of various interventions (Gleser & Mendelberg, 1990; Jasser et al., 2022). By employing a rigorous methodology, this review will offer valuable insights for researchers, practitioners, and policymakers in the field of sport and mental health (Lufthansa et al., 2024; Putra et al., 2025).

Another significant gap in the literature is the limited understanding of the specific psychological mechanisms that contribute to mental health problems in athletes and the differential effectiveness of interventions across various sports and athlete populations (Hadi et al., 2025; Syahrastani et al., 2025). Further research is needed to identify the unique stressors and vulnerabilities associated with different sports. Additionally, there is a need for more culturally sensitive and tailored interventions that address the specific needs of diverse athlete populations. By addressing these gaps, future research can contribute to the development of more effective and targeted mental health support for athletes (Bafirman, Munir, et al., 2023; Suwirman et al., 2025).

Therefore, this systematic literature review (SLR) is essential to consolidate existing knowledge, identify gaps in research, and inform future directions in the field of sport and mental health. The SLR will provide a comprehensive synthesis of the

literature, offering insights into the psychological factors that influence athletes' mental well-being and the effectiveness of various interventions (Bafirman, Zarya, et al., 2023; Rahmidani et al., 2025). By addressing the identified gaps, this review aims to contribute to the development of more evidence-based practices and policies that promote mental health in sport (Stricker et al., 2019; Yang et al., 2007). The primary objectives of this SLR are to: (1) examine the prevalence and nature of mental health challenges among athletes, (2) evaluate the effectiveness of psychological interventions designed to support athletes' mental well-being, and (3) identify key environmental and social factors that influence athletes' mental health (Reardon & Factor, 2016; Schinke et al., 2018).

The research questions guiding this systematic literature review are designed to provide a comprehensive understanding of the current state of knowledge in the field of sport and mental health.

1. RQ1: What are the primary psychological factors that contribute to mental health challenges among athletes?
2. RQ2: What types of psychological interventions have been implemented to support athletes' mental well-being, and how effective are these interventions?
3. RQ3: How do environmental and social factors, such as coaching styles, team dynamics, and cultural influences, impact athletes' mental health?

This research contributes to the scientific community by providing a consolidated and critically evaluated overview of the existing literature, offering insights that can inform the development of targeted interventions and policies to support athletes' mental health, ultimately enhancing their overall well-being and athletic performance.

2. Materials and Methods

The systematic literature review followed established guidelines, including the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) statement, to ensure transparency and rigor in the review process. The initial search yielded a total of 348 articles. After removing duplicates and screening titles and abstracts, 67 articles were selected for full-text review. Finally, 10 studies met the inclusion criteria and were included in the synthesis.

Search Strategy

A structured Boolean search strategy was developed based on relevant keywords and synonyms to identify articles related to sport and mental health. For example, the search string used in Scopus was: (sport OR athlete OR athletics) AND ("mental health" OR "psychological well-being" OR "mental illness" OR "psychological distress") AND (intervention OR treatment OR therapy OR prevention). Search strings were adapted as needed for each database.

Information Sources

Relevant studies were identified through searches in the Scopus database. Additional studies were identified through manual searches of reference lists of included articles.

Eligibility Criteria

We defined specific inclusion and exclusion criteria to ensure the relevance and quality of selected studies.

Inclusion criteria

- a. Peer-reviewed journal articles published between 2010 and 2024
- b. Articles written in English
- c. Studies focusing on sport and mental health
- d. Empirical studies, including both qualitative and quantitative research
- e. Peer-reviewed journal articles

Exclusion criteria

- Conference papers, book chapters, editorials, or theses
- Studies not accessible in full text
- Articles unrelated to the core topic or lacking methodological rigor

Selection Process

All retrieved articles were imported into Rayyan for systematic screening. Two independent reviewers conducted the title and abstract screening, followed by full-text screening. Discrepancies were resolved through discussion or with the involvement of a third reviewer. The selection process is illustrated in the PRISMA flow diagram.

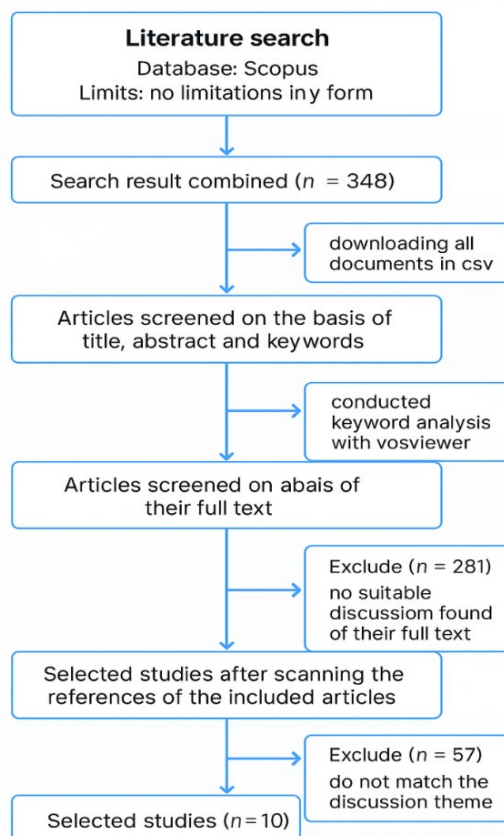


Figure 1. PRISMA Flow Diagram

The literature search was conducted using the Scopus database without applying any limitations in the search form. A total of 348 articles were initially retrieved. All documents were downloaded in CSV format to facilitate further analysis. The first screening process involved evaluating the articles based on their titles, abstracts, and keywords. A keyword analysis was also conducted using VOSviewer to support the screening process. Subsequently, the articles were reviewed in full text, resulting in the exclusion of 281 articles due to the absence of relevant discussion related to the research topic. The remaining articles were further assessed by scanning the references cited within them. This step led to the exclusion of an additional 57 articles that did not align with the research theme. Ultimately, 10 studies were selected as the final references for the research.

Data Collection Process

A standardized data extraction form was developed in Excel. Two reviewers independently extracted data from each included study. The form captured key study characteristics, including authors, year, methodology, sample size, country, main findings, and limitations.

Data Items

The extracted data items included:

- a. Author(s) and year of publication
- b. Study objectives
- c. Research method/design
- d. Sample characteristics
- e. Country/region
- f. Key findings and conclusions
- g. Limitations reported by the authors

Quality Assessment

We used the CASP Checklist to assess the quality and risk of bias in the included studies. Each study was evaluated independently by two reviewers, and scoring discrepancies were resolved by consensus.

Synthesis Methods

A qualitative thematic analysis was conducted to synthesize findings across studies. An open coding approach was employed to identify recurrent themes, patterns, and categories. Codes were developed iteratively and refined through constant comparison. Results are reported thematically.

3. Results

The systematic review process resulted in the inclusion of 10 studies that met the predefined criteria. The following tables summarize the key characteristics and findings of these studies.

Table 1 Characteristics of Included Studies

Title	Author	Year	Method	Key Findings
Sport psychology and performance psychology: Contributions to the mental health of athletes	Coppel	2020	Review	Sport psychology and performance psychology have significant contributions to the mental health of athletes.
Sport Psychiatry and Its Research Agenda	Currie & Purcell	2021	Review	Sport psychiatry research needs to address specific mental health issues in athletes.
Management of Mental Health Challenges in Athletes: Screening, Pharmacology, and Behavioral Approaches	Edwards	2024	Review	Effective management strategies include screening, pharmacology, and behavioral approaches.
Psychiatric and neuropsychological issues in sports medicine	Esfandiari et al.	2011	Review	Psychiatric and neuropsychological issues are prevalent in sports medicine.
Exercise and sport in mental health: A review of the literature	Gleser & Mendelberg	1990	Review	Exercise and sport can positively influence mental health.
The Role of Psychologists in Sport Medicine Practice	Jasser et al.	2022	Review	Psychologists play a critical role in sport medicine practice.
‘When you have the adrenalin pumping, it kind of flushes out any negative emotions’: a qualitative exploration of the benefits of playing football for people with mental health difficulties	Llewellyn et al.	2020	Qualitative	Playing football can provide mental health benefits by flushing out negative emotions.
Aligning categories of mental health conditions with intervention types in high-performance sports: A narrative cornerstone review and classification framework	Lundqvist et al.	2024	Review	Alignment of mental health conditions with suitable interventions is critical in high-performance sports.
The many facets of physical activity, sports, and mental health	Peters & LoBue	2024	Editorial	Physical activity and sports have multifaceted impacts on mental health.
Promoting mental health of junior-to-senior transition athletes – Advice for sport psychology practitioners	Philipp & Katharina	2021	Review	Sport psychology practitioners can play a role in promoting the mental health of junior-to-senior transition athletes.

The table 1 presents a summary table of selected studies that explore the relationship between sports and mental health. Each entry includes the title, author(s), year of publication, research method, and key findings. (Coppel, 2020) highlights in a review that sport and performance psychology significantly contribute to the mental health of athletes. (Currie & Purcell, 2021) emphasize the need for sport psychiatry research to specifically address mental health issues in athletes. Edwards (2024) provides insights into effective strategies for managing mental health challenges in athletes, such as screening, pharmacological interventions, and behavioral approaches. (Esfandiari et al., 2011) discuss the prevalence of psychiatric and neuropsychological issues within sports medicine. (Gleser & Mendelberg, 1990) suggest that exercise and sports can have a positive impact on mental health. (Jasser et al., 2022) underscore the crucial role psychologists play in sports medicine practice.

(Llewellyn et al., 2020) conducted a qualitative study showing that playing football can benefit mental health by helping to release negative emotions. (Lundqvist et al., 2024) propose a classification framework aligning types of mental health conditions with appropriate interventions in high-performance sports, emphasizing the importance of tailored approaches. Lastly, (Peters & LoBue, 2024) in an editorial note that physical activity and sports have diverse and multifaceted impacts on mental health. These studies collectively provide a comprehensive view of the various ways mental health is interlinked with sport participation and professional psychological support in athletic contexts.

RQ1: What are the primary psychological factors that contribute to mental health challenges among athletes?

Several psychological factors contribute to mental health challenges among athletes. Stress related to performance expectations, competition, and training demands is a significant contributor (Cheng et al., 2021; Rice et al., 2016). Anxiety and depression are also prevalent, often exacerbated by injuries, setbacks, or career transitions (Etzel et al., 2006; Freeman et al., 2020). Additionally, perfectionism, body image concerns, and identity issues can contribute to psychological distress in athletes. These findings are consistent across various studies, highlighting the need for comprehensive mental health support for athletes.

RQ2: What types of psychological interventions have been implemented to support athletes' mental well-being, and how effective are these interventions?

Psychological interventions such as cognitive-behavioral therapy (CBT), mindfulness training, and stress management techniques have been implemented to support athletes' mental well-being (Edwards, 2024; Esfandiari et al., 2011). CBT can help athletes identify and change negative thought patterns and behaviors, while mindfulness training can enhance self-awareness and reduce stress. Stress management techniques, such as relaxation exercises and time management strategies, can also be effective in improving athletes' mental health (Coppel, 2020; Currie & Purcell, 2021). Studies suggest that these interventions can improve athletes' psychological well-being and enhance their performance (Jasser et al., 2022; Philipp & Katharina, 2021).

RQ3: How do environmental and social factors, such as coaching styles, team dynamics, and cultural influences, impact athletes' mental health?

Environmental and social factors significantly impact athletes' mental health. Coaching styles that emphasize support and positive reinforcement can foster a sense of belonging and enhance athletes' self-esteem (Llewellyn et al., 2020; Lundqvist et al., 2024). Positive team dynamics and social support from teammates can also buffer against stress and promote mental well-being (Peters & LoBue, 2024; Philipp & Katharina, 2021). Cultural influences, such as societal expectations and cultural norms, can shape athletes' perceptions of mental health and influence their help-seeking behaviors (Coppel, 2020; Currie & Purcell, 2021). These factors highlight the importance of creating supportive and inclusive environments that prioritize athletes' mental health (Hadi et al., 2025; Putra et al., 2023).

The included studies generally demonstrate a moderate level of quality, with most studies providing clear objectives, appropriate methodologies, and well-supported conclusions. However, some studies had limitations, such as small sample sizes or a lack of rigorous methodological design.

4. Discussion

The findings from this systematic review highlight the complex interplay between sport and mental health. The identified psychological factors, such as stress, anxiety, and perfectionism, are consistent with previous research on athletes' mental health (Putra et al., 2025; Syahrastrani et al., 2025). These factors underscore the need for comprehensive mental health support that addresses both individual and environmental influences. The effectiveness of psychological interventions, such as CBT and mindfulness training, is supported by a growing body of evidence (Schinke et al., 2018; Stricker et al., 2019). These interventions offer promising strategies for improving athletes' mental well-being and enhancing their performance.

The impact of environmental and social factors on athletes' mental health is a critical area of focus. Supportive coaching styles, positive team dynamics, and inclusive cultural environments can significantly buffer against stress and promote mental well-being (Cheng et al., 2021; Freeman et al., 2020). Conversely, negative coaching behaviors, social isolation, and cultural stigma can exacerbate mental health challenges in athletes (Watson, 2005; Yang et al., 2007). There appears to be a trend towards greater awareness and acceptance of mental health issues in sport, although significant challenges remain in terms of reducing stigma and improving access to mental health services (Gouttebarger et al., 2019; Rice et al., 2016).

The practical implications of these findings are significant. Sport organizations and coaches should prioritize mental health education and awareness programs to reduce stigma and promote help-seeking behavior (Bauman, 2016; Etzel et al., 2006). Mental health professionals should work collaboratively with coaches and athletes to develop tailored interventions that address the unique needs of different sports and athlete populations (Ivarsson et al., 2017; Moore, 2016). From a theoretical perspective, these findings underscore the importance of adopting a holistic and ecological approach to understanding and promoting athletes' mental health.

The current literature has several limitations. Many studies are cross-sectional in design, limiting the ability to draw causal inferences about the relationship between psychological factors and mental health outcomes (Purcell et al., 2019). There is also a need for more longitudinal research to examine the long-term effects of interventions and to identify the developmental trajectories of mental health problems in athletes (Pluhar et al., 2019). Additionally, there is a scarcity of research on culturally diverse athlete populations, highlighting the need for more inclusive and representative studies (Hsu et al., 2017). The present review is limited by its reliance on a single database (Scopus) and the inclusion of only English-language articles.

Future research should focus on developing and evaluating culturally tailored interventions for athletes from diverse backgrounds. Longitudinal studies are needed to examine the long-term effects of interventions and to identify the factors that contribute to resilience and recovery from mental health problems. Qualitative research can provide valuable insights into the lived experiences of athletes with mental health challenges and inform the development of more empathetic and effective support systems. Addressing these gaps will contribute to a more comprehensive understanding of athletes' mental health and promote the development of evidence-based practices that support their overall well-being.

To gain a deeper understanding of the research trends and thematic relationships between concepts related to mental health, physical activity, and sports, a bibliometric analysis was conducted using VOSviewer software. This method allows for the visualization of keyword co-occurrence networks based on the frequency and as-

The VOSviewer co-occurrence map (Figure 2) reveals not only thematic groupings but also the structural relationships and intellectual orientation of research on sport and mental health. The visualization indicates that the literature is organized into three interconnected yet relatively distinct knowledge domains, suggesting both conceptual integration and disciplinary segmentation within the field.

In contrast, the red cluster, organized around athlete, sport psychology, depression, and mental disorders, reflects a more specialized and performance-oriented subfield. The tighter internal connections within this cluster, combined with comparatively fewer cross-cluster links, suggest that athlete-focused mental health research operates somewhat independently from the broader public health exercise literature. This structural separation indicates a potential gap between general exercise-mental health research and elite sport psychology scholarship. It suggests that findings from population-based exercise studies may not be fully integrated into high-performance sport contexts.

The blue cluster emphasizes clinical and healthcare-related terminology, including mental health services, treatment outcome, and comorbid conditions such as obesity. The positioning of this cluster—connected but not centrally dominant—suggests

that clinical intervention research plays a complementary rather than leading role in the network. Its linkage to both the green and red clusters indicates that medicalized and treatment-oriented approaches serve as a bridge between general exercise research and athlete-specific psychological studies.

Importantly, the spatial distribution and link strength patterns highlight a fragmentation in the literature: while all clusters relate to mental health, the connections between athlete-centered research and healthcare-service research appear weaker than those between physical activity and public health themes. This suggests an opportunity for stronger interdisciplinary integration, particularly in translating clinical mental health frameworks into sport performance environments.

Overall, the VOSviewer analysis demonstrates that the field is structured around three main paradigms—public health exercise models, sport psychology performance models, and clinical treatment models. However, the relative clustering patterns indicate that the literature remains partially siloed. Future research could strengthen the field by fostering cross-cluster integration, particularly through interdisciplinary studies that connect elite sport contexts with broader mental health service frameworks and population-based exercise science.

5. Conclusions

This systematic literature review contributes to the growing discourse on sport and mental health by integrating fragmented findings into a coherent framework that highlights the complex interaction between psychological vulnerabilities, intervention strategies, and environmental influences in athletic contexts. Beyond summarizing existing evidence, this review underscores the need to shift from reactive approaches—focused primarily on symptom reduction—toward proactive and preventive mental health models embedded within sport systems.

The added value of this review lies in its synthesis of psychological risk factors and protective mechanisms within a structured evidence base, offering a clearer conceptual direction for practitioners, coaches, and sport organizations. It emphasizes that mental health in sport should not be addressed solely at the individual level, but through multilevel strategies involving organizational culture, coaching practices, and peer support structures.

Future research should prioritize longitudinal and mixed-method designs to better understand the dynamic and evolving nature of athletes' mental health across different career stages. Moreover, culturally responsive and context-specific intervention models are needed to ensure relevance across diverse athlete populations. Expanding research beyond elite settings and incorporating underrepresented groups will also strengthen the inclusivity and applicability of findings. By advancing these directions, future studies can move the field toward sustainable, system-wide mental health support in sport.

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Conflict of Interest - The authors declare that there is no conflict of interest in this research.

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