

## Counseling and mental health interventions in sports: A systematic review of current practices and outcomes

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### ABSTRACT

This study aimed to highlight the importance of structured psychological intervention in supporting athletes' recovery from injury, managing stress, and preventing future injuries. This study synthesised various relevant studies using a systematic literature review approach, with data sources from the Scopus database. The inclusion criteria included empirical studies, review articles, book chapters, and conference papers published between 1976 and 2024. The results of the study show that psychological interventions such as cognitive behavioral therapy (CBT), stress management programs, and goal-setting strategies contribute significantly to athletes' mental resilience and physical recovery. Social support from family, coaches, and teammates also accelerated the rehabilitation process and increased recovery effectiveness. In addition, the integration of mental health strategies in training programs can reduce the risk of injury by managing competitive pressure and emotional stress. In conclusion, mental health counseling and interventions in sports are essential for improving the holistic well-being of athletes. This intervention not only helps with injury recovery but also serves as a preventive measure to maintain optimal performance. Collaboration between medical personnel and sports psychologists is necessary to ensure a comprehensive recovery

plan covering both physical and mental aspects. This study emphasized the importance of implementing mental health strategies to improve athletes' performance and well-being in competitive sports.

## **KEYWORDS**

Counseling; Mental Health; Sports; Athlete's Psychology

## **1. INTRODUCTION**

Athlete's physical and mental well-being are two interrelated elements that cannot be separated in sports (Stambulova & Wylleman, 2019). As expectations and competitive pressures increase, both at amateur and professional levels, athletes face major challenges that affect not only their performance on the field but also their mental and emotional condition (Chang et al., 2020; Wylleman et al., 2014). Injuries, for example, are one of the main factors that can impair this balance. Physical injuries often result in frustration, anxiety, and even depression, which impedes the recovery of the sport (Crossman, 1997; Trainor et al., 2020). Therefore, mental health interventions in sports are increasingly receiving important attention, especially in support of rehabilitation processes and further injury prevention.

Counselling and mental health interventions in sports have a central role in maintaining the welfare of athletes. Studies have shown that structured intervention programmes, including stress management, goal setting, and social and psychological support, positively impact athletes' performance and aid in their recovery from injuries (Arshi et al., 2023; Geiger et al., 2023; Petersen et al., 2023; Weiß et al., 2024b). Good mental balance not only helps athletes cope with physical stress, but also speeds up the rehabilitation process and reduces the risk of re-injury (Geiger et al., 2023; Petersen et al., 2023).

Injuries not only cause physical effects but also cause significant emotional disturbances. Injured athletes often experience anxiety about the future of their careers or depression due to isolation from the competitive environment they usually face (Johnson, 2000; Weiß et al., 2024b). This makes it important for proper psychological interventions, such as cognitive-behavioural counselling (CBT), to help athletes overcome irrational thoughts and develop a more positive view of their recovery process (Werner et al., 2023). With adequate psychological support, athletes can remain motivated, maintain confidence, and avoid feelings of despair during recovery.

Moreover, the importance of social support from family, coaches, and teammates should not be ignored. Social support serves as an emotional foundation that helps athletes feel mentally and physically supported (Freeman, 2020; Thoits, 2011). This support also increases athletes' adherence to rehabilitation programs, facilitating faster and more efficient recovery (Johnson, 2000; Weiß et al., 2024b). The collaboration between medical personnel and sports psychologists ensures that recovery focuses not only on the physical, but also on the mental aspects, which are critical to the success of long-term rehabilitation (Arshi et al., 2023; Kara et al., 2023).

Structured psychological intervention in training programmes is equally important as it can reduce the risk of injury before it occurs. Effective stress management helps athletes cope with pressures that arise during intensive training or competition, thus preventing mental and physical fatigue that can increase the likelihood of injury (Fletcher & Arnold, 2021; Mellalieu et al., 2009; Trainor et al., 2020). Through realistic and measurable goal setting, athletes are given clear guidance to achieve optimal performance without oversteering (Doron & Martinet, 2021; Smith, 2021).

Overall, counseling and mental health interventions in sports have become crucial in supporting athletes' mental health, improving performance, and ensuring that their recovery from injury is successful. With a holistic and evidence-based approach, this intervention program provides comprehensive support, both in the physical and mental aspects, allowing athletes to compete again with optimal conditions.

We conducted this study using a systematic literature review method, which aims to collect, analyse, and synthesize various studies relevant to counselling and mental health interventions in sports. We have studied a variety of credible and verified sources in depth through this approach to understand how structured psychological interventions can support athletes' mental health, prevent injuries, and accelerate physical and mental recovery. This method allows researchers to get a comprehensive picture of effective strategies in maintaining athletes' mental and physical balance and evaluate the impact of intervention on their long-term performance and well-being.

## **2. METHODS**

### **2.1. Search Strategy**

Researchers conducted a systematic literature review to collect and synthesize evidence about counseling and mental health interventions in sports. The data collection process utilizes the Scopus database. Searching through Scopus is considered more credible and has high accreditation in the

publication of scientific works. In this search, researchers searched for keywords relevant to the theme and combined them with the signs "AND" and "OR" for the evidence search process (Table 1).

**Table 1.** Scopus database evidence search process

Title, Abstract, Keyword	("Counseling" OR "Mental Health Interventions" OR "Psychological Interventions") AND ("Sports" OR "Athletes") AND ("Current Practices" OR "Mental Health Outcomes" OR "Psychological Well-being" OR "Anxiety" OR "Depression" OR "Stress")
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**2.2. Inclusion and Exclusion Criteria**

The inclusion criteria were developed to guide authors in collecting relevant studies for this review first published between 1976 and 2024. This is due to the initial publication of the theme on counselling and mental health interventions in sports in 1976. As stated by Maurer-Groeli (1976) there's body-centered therapy. This is done by physiotherapy, kinesitherapy, gymnastic exercises, and exercises performed either individually or together with the partner and within the group, creating a different psychotherapeutic relationship than pure verbal psychotherapists. (Hubble & Gelso, 1978; McIntosh, 1979).

Secondly, we have included in our search process all review articles and empirical studies with designs ranging from quantitative or qualitative case studies, qualitative policy analysis and evaluation, conceptual studies, book chapters, and conference processes. Despite the common knowledge that book chapters and conference processes are less rigorous academic sources than journal articles, we have chosen to include them, given the limited number of discussions on themes related to counseling and mental health interventions in sports. Then thirdly, we have limited our inclusion to studies that focus on mental health, counselling, psychology, athletic performance, stress, depression, physiotherapy, and then we also include studies on patient counseling, anxiety, sports injuries, emotional stress, running, and others, as shown in Figure 1.



Source type	Sum
Journal	488
Book	25
Book series	3

The researcher systematically screened documents to select only those pertinent to the theme of counselling and mental health interventions in sports. This screening process involves strict inclusion and exclusion criteria guide the screening process, ensuring the inclusion of only qualified and appropriate studies in the analysis. Figure 2 presents PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses), which describes in detail the number of studies selected, eliminated, and the reasons for their exclusion at each screening stage

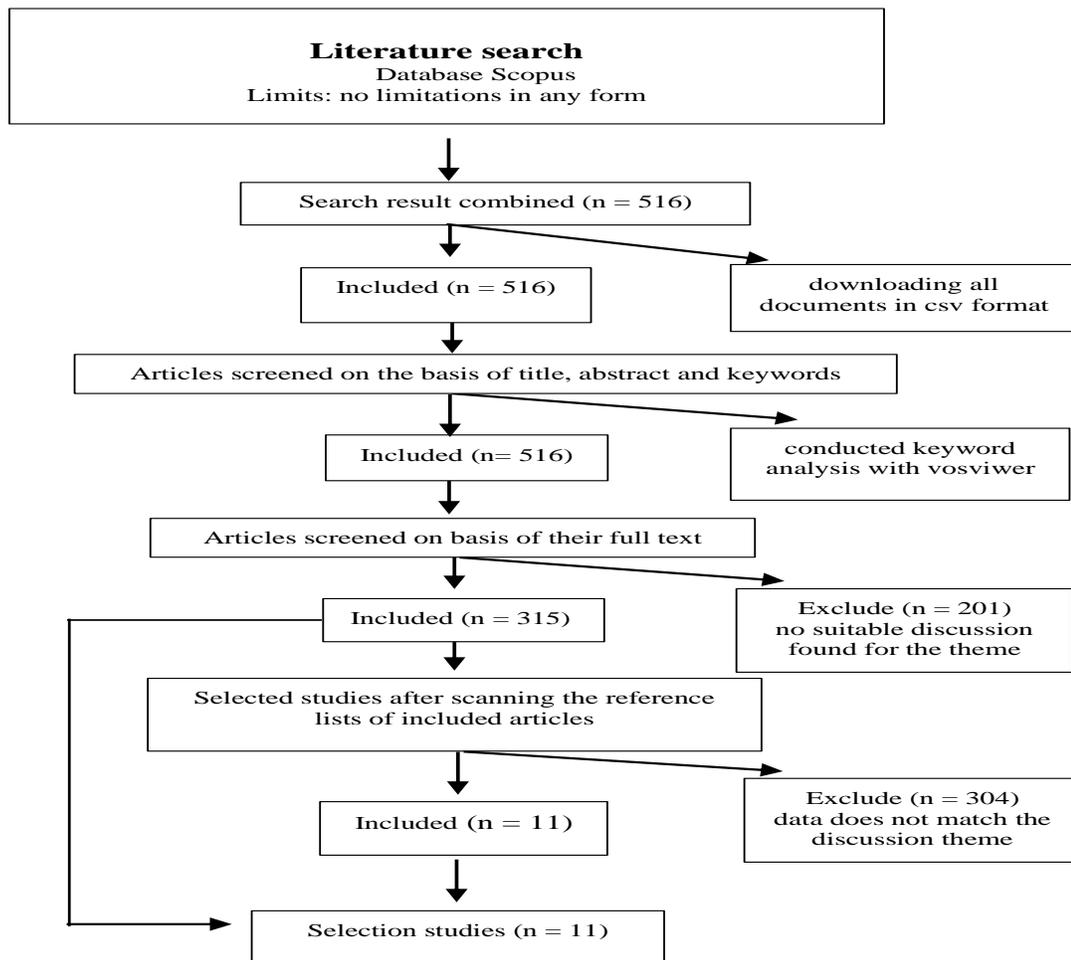


Figure 2. PRISMA flow diagram

### 3. RESULTS AND DISUCSSION

The analysis of the 11 selected articles, conducted using the NVivo software, revealed six main themes that were frequently discussed in the relevant literature. These themes became important focuses in this study, highlighting key aspects of counselling and mental health interventions in sports. An in-depth analysis of these articles revealed that these themes can be used as a result of research discussions, providing relevant and significant insight into the role of psychological intervention in supporting athletes' mental and physical well-being.

**Table 3.** Summary of the eleven articles selected after document screening criteria

Author	Title	Year	Summary
Petersen et al. (2023)	Mental health promotion in youth sporting clubs: predictors of stakeholder participation	2023	This article emphasizes the importance of collaboration between stakeholders in sport to improve the effectiveness of mental health promotion
Arshi et al. (2023)	Return to Sport After Hip and Knee Arthroplasty: Counseling the Patient on Resuming an Active Lifestyle	2023	The importance of postoperative counseling to support patients in returning to physical activity and exercise safely and effectively
Weiß et al. (2024)	The Role of Sport Psychology in Injury Prevention and Rehabilitation in Junior Athletes	2024	The right psychological approach can help in improving athletes' performance, preventing injuries, and accelerating mental and physical recovery after injuries
Hagan (2021)	Investigating pre-competition-related discrete emotions and unaccustomed religious coping among elite student-athletes: Implications for reflexive practice	2021	Counselling and mental interventions that integrate religious aspects can help reduce negative emotional impacts and improve athletes' performance and well-being
Sakamoto et al. (2024)	Factors Associated with Anxiety and Depression among Elite Collegiate Badminton Players in Japan: Exploratory Analysis	2024	A comprehensive approach that focuses not only on sports performance, but also on other aspects of life that support mental health, is indispensable to maintaining the mental well-being of elite athletes
Geiger et al. (2023)	Mental health symptoms in German elite athletes: a network analysis	2023	the importance of comprehensive mental health interventions, not only to manage symptoms but also to understand the underlying causative factors, such as injuries, exercise load, and socio-economic conditions
Johnson (2000)	Short-term psychological intervention: A study of long-term-injured competitive athletes	2000	Cognitive-behavioral has the potential to improve the mood and adaptive attitude of injured athletes, thus helping them in dealing with physical rehabilitation and

			preparation for returning to competition
Brick et al. (2022)	The impact of verbal and physical abuse on distress, mental health, and intentions to quit in sports officials	2022	Evidence-based psychological support is needed to address harassment, manage conflict, and support referees' mental health needs
Zhou et al. (2024)	The influence of competitive anxiety of Chinese elite swimmers	2024	By combining psychological interventions, counseling, and coping strategies, elite athletes can better manage their anxiety and maximize their performance in international competitions
Stone et al. (2023)	The Psychology of Athletic Tapering in Sport: A Scoping Review	2023	This article supports the need for the integration of psychological interventions during the tapering period to improve the performance and mental well-being of athletes
Kara et al. (2023)	The Effects of a Rational Emotive Behaviour Therapy (REBT) Group Counselling Program on Competitive Anxiety in Turkish Student-Athletes	2023	Group counseling such as in the REBT program also provides important social support for athletes in the face of competitive pressure

Based on the selection of this article, the study identified six subthemes: the role of psychology in the prevention of sports injuries, the significance of structured psychological intervention, the relationship between mental health and athlete performance, the impact of cognitive restructuring on injury rehabilitation, and the necessity of medical attention. He plays a crucial role in promoting mindfulness and relaxation during injury rehabilitation, as well as highlighting the importance of social support in this process.

### ***Psychology in the Prevention of Sports Injury***

Stress is one of the most common psychological factors experienced by athletes, especially young athletes who are in the career development stage and face high pressure to achieve success. (Arshi et al., 2023; Johnson, 2000). Stress management plays an important role in injury prevention because excessive stress can affect an athlete's physical and mental performance (Geiger et al., 2023; Zhou et al., 2024). Stress can come from a variety of sources, such as personal expectations, pressure from coaches and families, and competition in competition (Stone et al., 2023; Weiß et al., 2024b). When an athlete is unable to manage this stress, they are more prone to mental and physical fatigue, which in turn increases the risk of injury.

Stress management includes a variety of techniques aimed at helping athletes cope with mental stress that can interfere with physical performance. Some of these techniques include

breathing exercises, progressive relaxation, visualization, and mindfulness. (Fletcher & Arnold, 2021; Mellalieu et al., 2009). These techniques not only help relieve mental tension, but also have a positive impact on athletes' physical condition by lowering muscle tension, increasing concentration, and maintaining emotional balance during training and competition (Doron & Martinent, 2021; Smith, 2021).

Unmanaged stress can lead to mental fatigue, which affects athletes' ability to stay focused and maintain good techniques (Arshi et al., 2023; Weiß et al., 2024b). When athletes experience mental fatigue, they may not be able to anticipate physical risks effectively, which eventually increases their chances of getting injured, such as sprain, muscle injury, or other accidents in the field (Johnson, 2000; Weiß et al., 2024b). Stress can also interfere with physical recovery after exercise, thus increasing the risk of overtraining and continuous injury (Geiger et al., 2023).

Sports psychologists have a crucial role in helping athletes develop stress management skills. They work directly with athletes to provide psychological support and guide them in implementing techniques that can help manage stress more effectively (Arshi et al., 2023; Stone et al., 2023). Effective counseling programs in sports focus not only on mental health in general, but also on specific aspects related to mental health in the context of physical performance and injury prevention (Arshi et al., 2023; Kara et al., 2023). In their role as counsellors, sports psychologists can provide guidance in stress management tailored to the needs of individual athletes. Some relevant forms of intervention include cognitive-behavioural counselling and preventive interventions.

### ***The Importance of Structured Psychological Intervention***

Structured and evidence-based psychological interventions play a very important role in supporting the performance and mental well-being of athletes, especially young ones. In sports, where competitive pressure and risk of injury are always present, proper intervention can prevent mental problems that can affect performance and reduce the risk of injury (Johnson, 2000; Weiß et al., 2024b). One of the major challenges facing athletes is mental and emotional stress, which, if not properly managed, can increase the risk of injury and slow the recovery process (Crossman, 1997; Trainor et al., 2020). Therefore, the integration of structured psychological interventions into training programs becomes important in creating a balance between optimal performance and good mental health.

## ***Mental Health and Athlete's Performance***

Mental health is an inseparable aspect of athletes' physical performance, especially during the recovery from injury. Athletes' injuries, especially if they are long-term, not only affect the physical aspect but can also cause emotional and mental disorders (Geiger et al., 2023; Petersen et al., 2023). In this context, the relationship between mental health and athlete performance becomes very important. Athletes may struggle to return to their optimal performance if they lack a good mental balance, which can disrupt their physical recovery.

Injuries, especially those that require prolonged recovery, often have a significant psychological impact on athletes (Geiger et al., 2023; Johnson, 2000). They not only have to face the physical inability to train or compete but also have to bear the emotional burden that comes with these conditions. Severe or prolonged injuries can trigger anxiety and depression in athletes (Rice et al., 2016; Wolanin et al., 2015). This can be due to fears of a loss of ability to compete at the highest level, concerns about the future of a career, or feelings of loss of identity as an athlete (Nippert & Smith, 2008; Wiese-Bjornstal, 2010). For athletes, competition and training are an important part of their lives, and the inability to engage in these activities can trigger lingering feelings of frustration, anxiety, and sadness (Hagan, 2021; Sakamoto et al., 2024).

Injured athletes often experience a decline in confidence, especially if they feel that the injury prevents them from returning to their best physical condition (Johnson, 2000; Weiß et al., 2024b). They may feel unsure whether they can return to top performance, and these feelings can affect their motivation to undergo optimal rehabilitation.

Rational Emotional Behaviour Therapy (REBT) is one method often used to help athletes overcome anxiety and change negative thinking patterns about their injuries (Kara et al., 2023; Zhou et al., 2024). REBT teaches athletes to identify irrational thoughts like "I will never return to my best performance" and replace them with more realistic and positive ones like "I'm in the process of recovery and will come back stronger" (Kara et al., 2023).

Counseling helps athletes go through difficult phases in recovery, provides emotional support, and equips them with skills to stay focused and optimistic. This is vital in helping them maintain the motivation to recover physically.

## ***Cognitive Restructuring and Its Impact on Injury Rehabilitation***

Cognitive restructuring is a psychological approach that aims to help individuals identify and change negative or irrational thinking patterns that may arise in response to specific situations, such

as injury, and other factors (Mehta et al., 2011; Thielemann et al., 2022). Injured athletes often experience negative thoughts such as:

1. "This injury will ruin my career."
2. "I'll never be able to return to the best performance."
3. "This rehabilitation process is too difficult, and I'm not sure I can solve it."

This frustration, if not properly managed, can lead to depression, anxiety, or even a desire to stop exercising (Brick et al., 2022; Sakamoto et al., 2024; Zhou et al., 2024). Psychological techniques in cognitive restructuring provide tools for managing these negative emotions. (Ciharova et al., 2021; Clark, 2013). For example, an athlete who is frustrated about not being able to train as usual can be helped to see the situation as an opportunity to focus attention on other aspects of their performance, such as tactics, mentality, or better physical recovery.

Cognitive restructuring is an essential tool in athlete injury rehabilitation, which helps to change the negative view of injury and recovery process to more positive and constructive. (Haney, 2004; Motevalli et al., 2022). By overcoming mental stress and frustration through this technique, athletes can more easily maintain motivation and compliance with rehabilitation programs.

### ***Mindfulness and Relaxation Injury Rehabilitation***

Mindfulness is a technique that involves full awareness of the current moment without giving any assessment (da Silva et al., 2023; Sauer et al., 2013). In the context of injury rehabilitation, mindfulness can be an effective tool for managing pain (Weiß et al., 2024b). When athletes are injured, physical pain is often exacerbated by negative thoughts, such as anxiety about the future of a career, fear of inability to recover, or frustration due to slow recovery (da Silva et al., 2023; Hagan, 2021; Sauer et al., 2013).

Mindfulness teaches athletes to focus on the current moment and to observe the sensation of pain without giving negative emotional reactions (Birrer et al., 2012; Hut et al., 2023). This can help them to reduce the fear and anxiety that usually accompanies pain, making them better able to tolerate it. For example, instead of thinking of pain as a constant threat, athletes can be taught to observe pain as a physical sensation that appears and disappears, without being caught in a negative mindset (Nippert & Smith, 2008; Soundy & Lim, 2023; Weiß et al., 2024a).

In addition to mindfulness, relaxation training is also an important part of the rehabilitation program to maintain the mental balance of athletes (Johnson, 2000; Kara et al., 2023). Relaxation

techniques help reduce muscle tension, lower stress levels, and increase mental focus, all of which are important in supporting the recovery of injuries. (Alicea et al., 2024; Ekelund et al., 2022; Pelka et al., 2016). Some relaxation techniques often used in injury rehabilitation include:

*a. Progressive Relaxation*

Progressive relaxation involves systematic tightening and releasing of muscles to help athletes identify and reduce physical tension in their bodies. (OLADEJO, 2021; Pelka et al., 2016). This technique is useful for athletes who may experience muscle strain due to stress or anxiety associated with their injuries (Johnson, 2000; Kara et al., 2023). By training the body to relax, athletes can improve blood circulation to the injured area, which supports the healing process (Alicea et al., 2024) .

*b. Deep Breathing*

Deep breathing exercises are simple but effective techniques used to calm the mind and body (Migliaccio et al., 2023; Zaccaro et al., 2018). Slow, regular deep breathing helps activate the parasympathetic nervous system, which is responsible for the body's response to relaxation (Greiwe et al., 2022; Laborde et al., 2024). This technique can be used during physical rehabilitation sessions to reduce anxiety and increase focus (Laborde et al., 2024; Migliaccio et al., 2023).

*c. Visualization*

Visualization involves imagining calming images or scenarios, which can help athletes feel more relaxed and mentally prepared for recovery (Stephen et al., 2022; Warner & McNeill, 1988). In the context of rehabilitation, visualizations are often used to help athletes imagine their bodies recovering and returning to optimal performance (Arshi et al., 2023; Weiß et al., 2024b). This not only increases their motivation, but also helps reduce the anxiety that may result from uncertainty about the future.

### ***The Role of Social Support in Rehabilitation***

Social support plays an important role in the recovery process of injured athletes (Johnson, 2000; Weiß et al., 2024b). This support can come from a variety of sources, such as family, coaches, teammates, and medical personnel and sports psychologists (Crossman, 1997; Weiß et al., 2024a). During the rehabilitation phase, social support plays a major role in motivating athletes, improving mental health, and accelerating physical recovery (Mehta et al., 2011; Nippert & Smith, 2008). Strong support not only provides emotional comfort, but also helps athletes feel that they are not alone in the face of injury (Nippert & Smith, 2008; Weiß et al., 2024b, 2024a).

Support from family, coaches, and teammates had a significant impact on mental well-being and the results of athlete rehabilitation (Fernandes et al., 2014; King et al., 2023). Family is often the most stable source of emotional support for an athlete (Johnson, 2000; Weiß et al., 2024b). When an injury occurs, the athlete may feel isolated, lose direction, or worry about the future of his career. Families play a role in creating a safe and positive environment where athletes can feel supported during the recovery process (Crossman, 1997; King et al., 2023).

Apart from family, coaches and teammates are an important part of the athletes' social ecosystem (Fernandes et al., 2014; King et al., 2023). Positive relationships with coaches and teammates can provide a positive mental boost during the recovery process. In addition to family, coaches and teammates are an important part of the athletes' social ecosystem. Coaches play an important role in providing mental and technical guidance. They not only assist athletes in adjusting their post-injury training programme but also provide an emotional boost that helps keep athletes moving forward (Freeman, 2021; Tranaeus et al., 2024). Supporting coaches encourage athletes to focus on the recovery process, provide positive feedback, and provide hope that they will return to the field (Freeman, 2021; King et al., 2023).

Teammates can also be an important source of social and moral support. They can share experiences, provide motivation, and help athletes feel that they are still part of the team, despite being rehabilitated (Fernandes et al., 2014; Freeman, 2020). In addition to family and team support, collaboration between medical personnel and sports psychologists is essential in ensuring an optimal rehabilitation process. Injured athletes need physical support from medical teams and mental support from sports psychologists to ensure a holistic recovery (Freeman, 2020, 2021).

While the medical team focuses on physicality, sports psychologists play a role in helping athletes cope with the psychological effects of injury. Mental recovery is as important as physical recovery, especially if athletes experience anxiety, depression, or emotional trauma from injury. Then as a whole (Thoits, 2011). Social support from family, team, and teammates, as well as effective collaboration between medical teams and sports psychologists, is essential in the rehabilitation process of athlete injuries. Then, this support can help maintain the mental balance of athletes, while collaboration between medical personnel and sports psychologists ensures that recovery works holistically, covering both physical and mental aspects.

#### 4. CONCLUSIONS

The study emphasizes that counseling and mental health interventions in sports play a very important role in supporting athletes' mental and physical well-being, both in preventing injuries and accelerating recovery. Stress management, goal setting, and social support are key elements that can improve athletes' performance and maintain mental balance during competition and rehabilitation, as proven by various themes raised. Structured intervention programmes, such as cognitive-behavioural counselling (CBT), help athletes cope with anxiety, increase motivation, and develop mental resiliency. In addition, the support of family, coaches, and teammates plays a significant role in maintaining the athletes' motivation and emotional well-being, which ultimately contributes to faster physical recovery. The collaboration between medical personnel and sports psychologists also ensures that recovery takes place holistically, covering both physical and mental aspects. Thus, proper psychological intervention not only helps athletes recover from injury but also provides a strong foundation for returning to optimal performance without risk of re-injury. This conclusion asserts that psychological intervention in sports is not only an additional option but an essential need to support the long-term success and overall well-being of athletes.

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The authors declare no conflict of interest.

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