

The Effects of Implementing Mindfulness Training in Professional and Retired Soccer Players

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Abstract— Implementing mindfulness training has positive effects on both current and retired professional soccer players. Mindfulness training should be implemented into athlete training programs as it can significantly enhance players' performance, resilience, and overall well-being, making it a valuable addition to their training programs. The main arguments include an overview of mindfulness techniques such as Psychological Skills Training (PST), Mindfulness-Based Stress Reduction (MBSR), Mindfulness Acceptance and Commitment (MAC) approach, and Mindful Sport Performance Enhancing (MSPE), all tailored for sports performance. The benefits of mindfulness training include more effective decision-making, attentional focus, and emotional regulation leading to better on-field performance and off-field mental health. Additionally, there are specific challenges faced by retired players, and mindfulness practices can offer alternate coping mechanisms in addition to aiding their transition away from professional sports by addressing anxiety, depression, and stress. Despite the potential criticism regarding resource allocation and the prioritization of physical training, the short- and long-term benefits of mindfulness justify its integration into the training regimens of soccer players. Emphasis on the importance of incorporating mindfulness to enhance both the physical and mental aspects of soccer will ultimately advocate for its widespread adoption into the sport.

Keywords— *Mindfulness, Soccer Players, PST, MAC, MBSR, MSPE, Well-Being*

I. THE EFFECTS OF IMPLEMENTING MINDFULNESS TRAINING IN PROFESSIONAL AND RETIRED SOCCER PLAYERS

Each season, one in ten players struggle with the pressure and high expectations associated with the sport (FPA, 2024). Increasingly, current and retired players are speaking out about the mental challenges they face due to the demanding nature of professional soccer (FPA, 2024). Soccer players face immense pressure on and off the field throughout their careers and after retirement. This pressure stems from the need for constant focus, high levels of attention, rapid decision-making, coping with injuries, managing failures and setbacks, and handling the demands of success (Ivarsson et al., 2015). The ability to adapt and cope with these challenges can significantly enhance a player's performance, providing a competitive edge over opponents (Memmert et al., 2023). One effective method to improve these coping and adaptation skills is through mindfulness, a practice that involves maintaining moment-to-moment awareness of one's thoughts and emotions without judgment (Moore, 2009).

Mindfulness practice typically includes techniques such as body scanning, focused attention on bodily sensations, and controlled breathing exercises, which can be either guided or solo (Fincham et al., 2023). Specific mindfulness training programs tailored for sports, such as Psychological Skills Training (PST) developed by Kerr & Gross (1996, as cited in Ivarsson et al., 2015), emphasize imagery, positive self-talk, and relaxation techniques. Similarly, Norouzi et al. (2020) explains the Mindfulness-Based Stress Reduction (MBSR) program which incorporates meditation and yoga to alleviate stress and anxiety. Gardner and Moore (2007) developed the Mindfulness, Acceptance, and Commitment (MAC) approach specifically for athletes to enhance their awareness and attention through mindfulness techniques. The Mindful Sport Performance Enhancing (MSPE) program (Pineau et al., 2014), another sports-specific method, aims to achieve a state of flow, characterized by full immersion in activity, which helps reduce anxiety and stress while improving overall well-being (Csikszentmihalyi, 1990).

To further support the effectiveness of these mindfulness techniques, psychologists can assess players using tools like the Warwick-Edinburgh Mental Well-Being Scale (WEMWBS), using a 14-item, five-point scale, that evaluates players' outlook on the future (Tennant et al., 2007), and the Mindfulness Attention Awareness Scale (MAAS), a 15-item, a six-point scale that measures present moment awareness (Brown & Ryan, 2003). Mindfulness training should be implemented in soccer training programs as it enhances athlete performance, resilience, and overall well-being, making it a valuable addition to training programs for current and retired players.

II. IMPORTANCE OF PRACTICING MINDFULNESS

Implementing mindfulness training, such as controlled breathing, is not just beneficial but essential for soccer players, both current and retired. The fast-paced nature of soccer demands quick decisions and constant adaptation, where players must stay focused and adjust effectively (Pineau et al., 2014). Through mindfulness practices like controlled breathing, athletes develop the skill to control their attention and increase their focus duration, enabling them to better adapt to various situations (Pineau et al., 2014).

The profound impact of practicing mindfulness for just ten minutes a day can significantly improve players' attentional capacity by helping them tune into their bodily sensations and breath (Fincham et al., 2023). As their attentional capacity grows, players become more aware of their surroundings, leading to quicker decisions and enhanced performance (Memmert et al., 2023). This heightened awareness and improved adaptability allow players to make

better decisions, boosting their overall performance and giving them a competitive edge (Memmert et al., 2023).

Mental flexibility is a crucial asset when facing unpredictable or adverse situations, such as conceding a goal or making an error. By training to be mentally flexible, players recover from mistakes and remain focused on the game, increasing their resilience and ability to concentrate on the next play (Pineau et al., 2014). This ability to let go of past mistakes and focus on the present is a key principle of mindfulness – being fully present in each moment, including emotions, feelings, and thoughts (Pineau et al., 2014).

For retired players, the benefits of mindfulness are equally as important. Transitioning away from the sport they love can bring about anxiety and depression (Norouzi et al., 2020). Mindfulness practices offer a lifeline, providing essential coping mechanisms and helping retired athletes find balance and fulfillment in their new lives (Norouzi et al., 2020). Engaging in mindfulness helps them confront and process suppressed emotions, leading to a healthier and more fulfilling post-sport life (Norouzi et al., 2020).

Implementing mindfulness training in soccer programs is not only about improving immediate performance but also about fostering long-term mental resilience and well-being (Pineau et al., 2014). For current players, mindfulness enhances their ability to stay focused and adapt to the fast-paced, high-pressure environment of the game, giving them a competitive edge against opponents (Memmert et al., 2023). For retired players, mindfulness offers essential coping mechanisms that help them transition smoothly into life after soccer, promoting mental health and emotional balance (Norouzi et al., 2020). These benefits underscore the necessity of incorporating mindfulness training, as it equips soccer players at every stage of their career with the tools they need to thrive, both on and off the field.

III. MINDFULNESS REDUCES STRESS IN PLAYERS

Mindfulness interventions, such as Psychological Skills Training (PST), are incredibly powerful tools for reducing the immense stress soccer players face. The fast-paced, chaotic nature of soccer often leads to overwhelming stress, particularly due to the need for quick decision-making. Prolonged stress triggers the body's "Fight or Flight" response, a natural reaction allowing the body to fight or flee, which, if sustained, can result in physical effects on the body such as injuries (Williams & Andersen, 1998). However, practicing interventions such as PST, which emphasizes positive self-talk, imagery, and relaxation techniques, enables players to visualize themselves on the field, build unshakable confidence, and maintain a calm state (Ivarsson et al., 2015).

A study by Johnson et al. (2005, as cited in Ivarsson et al., 2015) revealed a significant reduction in injury frequency among players who participated in a seven-session relaxation intervention. The intervention group experienced only three injuries, versus 21 injuries in the control group, over a season (Johnson et al., 2005). By reducing stress, players think more clearly as their body and physiological systems will relax, thus preventing injuries and lowering stress and anxiety levels. Maintaining a calm state during play enables soccer players to relax their bodies and minds (Williams & Andersen, 1998).

Incorporating mindfulness into soccer training is not just a matter of enhancing physical and mental performance; it is a crucial part of protecting players' overall well-being (Ivarsson et al., 2015). The immense stress that soccer players endure on the field, driven by high standards and quick decision-making, can lead to heightened levels of anxiety and increased injury risk (Williams & Andersen, 1998). Mindfulness interventions, such as Psychological Skills Training (PST), play a pivotal role in reducing this stress, allowing players to maintain focus, relax their bodies, and prevent injuries (Williams & Andersen, 1998). By integrating mindfulness practices into training, players not only improve their ability to stay calm and composed during intense moments but also reduce the long-term physical toll of stress (Williams & Andersen, 1998). This approach—focusing on both mental and physical resilience—demonstrates why mindfulness is essential in player development.

IV. MINDFULNESS IMPROVES CONCENTRATION AND EMOTIONAL RESPONSE

Mindfulness training, such as Psychological Skills Training (PST) or Mindfulness-Based Stress Reduction (MBSR), profoundly increases the concentration, emotional response, and overall well-being of soccer players. By cultivating a non-judgemental state where individuals can observe their thoughts and emotions in real-time (Ivarsson et al., 2015), mindfulness allows players to process their thoughts and emotions as they occur, enabling them to maintain unwavering focus from one play to the next (Ivarsson et al., 2015).

Mindfulness training often emphasizes focusing on the breath, a practice that trains the mind to concentrate on the present task. This focus helps players develop greater control and awareness of their bodies and thoughts (Pineau et al., 2014). Enhanced concentration can lead players to achieve the flow state, where they are fully immersed and focused on their performance (Csikszentmihalyi, 1990). In this state, players experience a lack of self-consciousness, goal clarity, and complete control over their bodies and minds (Csikszentmihalyi, 1990). Achieving flow is beneficial for soccer players, as overthinking on the field can severely hinder performance (Csikszentmihalyi, 1990).

Mindfulness training plays a crucial role in enhancing both concentration and emotion regulation, making it indispensable for soccer players. The ability to focus intensely on the present moment and manage emotional responses under pressure is crucial in a sport where quick decisions and adaptability determine success (Csikszentmihalyi, 1990). By incorporating mindfulness practices such as Psychological Skills Training (PST) or Mindfulness Based Stress Reduction (MBSR), players can achieve heightened concentration, allowing them to enter a flow state where performance becomes seamless and instinctive (Csikszentmihalyi, 1990). By processing emotions in real time, athletes maintain composure and resilience, even in high-stakes situations (Ivarsson et al., 2015). This combination of focused attention and emotional control not only elevates individual performance but also fosters better communication and teamwork, ultimately strengthening the entire team's effectiveness (Ivarsson et al., 2015). Therefore,

incorporating mindfulness into training programs is essential for developing the mental sharpness and emotional stability soccer players need to excel on the field.

V. IMPROVED COMMUNICATION AND TEAMWORK IN THE THIRD FINAL

The Mindfulness, Acceptance, and Commitment (MAC) approach can significantly enhance teamwork and communication, particularly in the final third of the field. The soccer field can be divided into three zones: The defensive zone, the middle zone, and the opponent's defensive zone. When a team is attacking the opponent's defensive zone, known as the final third, they are in a prime position to score. The MAC approach is highly effective for improving awareness and attention (Moore, 2009). By enhancing attentional capacities and awareness of teammates, players are more attuned to their teammates' positions, facilitating seamless coordination and decision-making (Memmert et al., 2023).

Improved attentional capacity aids in maintaining ball possession, a fundamental objective in soccer, and enhances the effectiveness of coordinating movements with teammates (Memmert et al., 2023). This not only increases scoring opportunities but also improves the team's overall control of the game (Memmert et al., 2023).

Including mindfulness in soccer training is essential because it not only enhances individual mental focus but also elevates team dynamics, particularly in high-pressure situations like the final third of the field. Approaches such as the Mindfulness, Acceptance, and Commitment (MAC) approach sharpen players' attention to awareness, allowing them to be more in sync with their teammates and make better, faster decisions in the moments that matter most (Moore, 2009). This heightened communication and teamwork in the final third leads to increased scoring opportunities and overall game control, ultimately driving team success (Memmert et al., 2023). By fostering both individual concentration and collective cohesion, mindfulness transforms the way teams operate on the field, making it a critical component of soccer training for optimal team performance.

VI. MINDFULNESS BENEFITS FOR RETIRED PLAYERS

While current soccer players reap significant benefits from mindfulness techniques like Mindfulness, Acceptance, Commitment (MAC) in improving team communication, cohesion, and performance on the field, retired soccer players can also greatly benefit from these practices. Mindfulness-Based Stress Reduction (MBSR) offers vital support to retired soccer players who often struggle with the sense of loss and identity crisis when transitioning to everyday life after their careers (Norouzi et al., 2020). For these retired athletes, MBSR provides essential tools for managing the crippling anxiety and overwhelming depression that can accompany such a significant life change (Norouzi et al., 2020).

In recent years, elite soccer clubs have embraced mental training (Dixon et al., 2020), but many retired players did not have access to these resources during their careers (Taylor, 2014). As a result, they often suppressed their emotional

struggles and relied on their sport as a coping mechanism (Norouzi et al., 2020). The transition to a life without soccer can unearth these buried emotions, making the need for effective coping strategies more urgent than ever.

MBSR, which includes practices like yoga and meditation, can be a lifeline for retired athletes, helping them develop resilience against the emotional turmoil of post-career life (Norouzi et al., 2020). A study conducted by Baskin et al. (2003, as cited in Norouzi et al., 2020) illustrated the transformative power of MBSR. The study involved 20 retired professional players who participated in an eight-week MBSR program, resulting in a significant increase in psychological well-being and a marked reduction in anxiety, stress, and depression compared to a control group (Norouzi et al., 2020).

Mindfulness practices such as Mindfulness Based Stress Reduction (MBSR) and Mindfulness, Acceptance, Commitment (MAC) are not only critical for improving focus, communication, and performance of current soccer players, but they also provide support for retired players transitioning into life after the sport. The emotional challenges faced by retired athletes—such as identity loss, anxiety, and depression—show the importance of equipping them with mindfulness techniques that promote reliance and emotional well-being (Norouzi et al., 2020). While current players benefit from enhanced performance on the field, retired players can find purpose and fulfillment in managing their post-career struggles through practices such as meditation and yoga (Norouzi et al., 2020). By incorporating mindfulness into the routines of both current and retired soccer players, these practices become essential tools that support athletes, from their peak competitive years to their life beyond the game (Norouzi et al., 2020). This comprehensive approach ensures the mental and emotional well-being of players throughout their careers, reinforcing the importance of mindfulness training alongside physical preparation.

VII. DOWNSIDES OF MINDFULNESS TRAINING

Critics argue that soccer clubs should prioritize physical training over mindfulness training due to the significant constraints on time and resources. The substantial investments teams make in physical training facilities highlight this preference (Taylor, 2014). For example, elite soccer clubs like Manchester City invested a staggering \$244.2 million, and Real Madrid spent \$110.3 million, on their state-of-the-art training complexes (Ayamga, 2019). Such investments underscore the belief that physical training is paramount to achieving success on the field.

Teams allocate considerable resources to technical and conditioning coaches, ensuring that players are in peak physical condition (Taylor, 2014). Coaches and staff focus on mentally preparing players by outlining goals and expectations for games and training sessions, and they closely monitor players' physical activities. However, they may struggle to see the immediate value in supervising therapy or mental training sessions (Farias & Wikholm, 2016). The inherent resistance to new training methods is also a significant barrier. Players and coaches, accustomed to traditional physical training routines, often view these

approaches as requiring time and resources that are simply not available (Ivarsson et al., 2015).

Budget constraints further complicate the adoption of mindfulness practices. Teams often prefer to allocate their funds towards advanced equipment and facilities, believing these investments will yield more tangible results in terms of physical performance (Taylor, 2014). Building players' speed, strength, and endurance is seen as a more immediate and measurable way to enhance on-field performance (Taylor, 2014). These obstacles have led to the belief that physical training should take precedence.

While physical training provides short-term gains in speed, strength, and endurance—key elements for immediate success on the field—mindfulness offers long-term benefits that complement physical training in performance and overall well-being (Norouzi, 2020). Physical training targets measurable attributes such as fitness levels, aiding coaches in areas of improvement (Memmert, 2023). However, physical gains may plateau over time or be hindered by injuries, stress, or burnout (Ivarsson, 2015).

In contrast, mindfulness enhances resilience, focus, and stress management, which can protect athletes from burnout and improve recovery, aiding their long-term careers (Fincham et al., 2023). For example, mindfulness improves cognitive flexibility allowing players to adapt to high pressure game situations (Sullivan, 2022). Over time, the integration of mindfulness training can increase players' stress and anxiety management, potentially reducing stress and overexertion or poor decision making (Farias & Wikholm, 2016).

While physical training yields rapid results, the psychological results gained from mindfulness offer a solution for sustained success (Taylor, 2014). This makes mindfulness a valuable complement to training, by addressing not only immediate effects of physical training but long-term mental and emotional well-being for players (Fincham et al., 2023).

However, despite the emphasis on physical training, there are practical ways to integrate mindfulness yielding long-term benefits—such as improved well-being, reduced stress, and enhanced performance—without distracting from the focus on physical conditioning (Fincham et al., 2023). For example, the United States women's soccer team has collaborated with Headspace, a mobile app that allows players to fully customize their experience and practice mindfulness from the palm of their hand (Sullivan, 2022). This flexibility enables players to integrate mindfulness exercises seamlessly into their daily routines, especially during travel or recovery periods, ensuring consistent mental training without interfering with their training schedules (Sullivan, 2022).

Applications such as Headspace are affordable, offering an individualized solution for mindfulness practice (Sullivan, 2022). Teams can also streamline integrating mindfulness practice by offering short sessions before and after physical training. The U. S. women's team relies on team psychologists to guide them through group or individual sessions focused on stress reduction and mental clarity (Sullivan, 2022). Simple exercises such as controlled

breathing or guided meditation led by psychologists or mental coaches, makes it easy for players to integrate it into their schedules (Sullivan, 2022).

Although psychologists offer structured guidance, they might not always be available, especially on the road (Sullivan, 2022). In these cases, applications such as Headspace provide players with on-demand mental training resources that can be accessed anytime, whether at home, on the road, or during personal challenges (Sullivan, 2022). This autonomy allows for consistent mental training, offering the long-term benefits of mindfulness while accommodating for the unpredictable nature of soccer players' schedules (Sullivan, 2022).

VIII. COMPARATIVE BENEFITS OF MINDFULNESS FOR COACHES, CURRENT, AND RETIRED PLAYERS

Mindfulness training is not just a trendy add-on; it is a transformative tool that enhances the performance and well-being of both current and retired soccer players. For current players, mindfulness sharpens focus, improves in-game decision-making, and emotional regulation which directly impact on field success (Ivarsson et al., 2015). In a sport where split-second decisions can make the difference between victory and defeat, the heightened awareness and concentration brought by mindfulness is a crucial addition for players (Memmert et al., 2023). Another key component that has been stressed is reducing injuries, highlighting the significance of mindfulness for saving resources and promoting long-term well-being of enhanced physical performance (Ivarsson et al., 2015).

For retired players, the transition away from the sport they love can be a struggle, often leading to anxiety and depression (Norouzi et al., 2020). Mindfulness practices, such as Mindfulness-Based Stress Reduction (MBSR), provide invaluable support, offering positive coping mechanisms and helping to ease the transition into everyday life (Norouzi et al., 2020). These practices allow retired athletes to confront and process suppressed emotions, leading to a more balanced and fulfilling post-sport life (Norouzi et al., 2020). The long-term value of mindfulness stretches past the immediate performance of players, by creating life skills for players transitioning into retirement highlighting the impact of mindfulness (Norouzi et al., 2020).

The versatility of mindfulness cannot be overstated. Programs like the Mindfulness, Acceptance, and Commitment (MAC) approach (Gardner & Moore, 2007) or Mindful Sport Performance Enhancement Program (MSPE) are specifically designed to reduce stress, alleviate anxiety, and improve coping mechanisms (Pineau et al., 2014). The profound impact of just 10 minutes of daily mindfulness practice can significantly improve overall well-being and reduce stress in players (Fincham et al., 2023). Lower stress levels not only enhance performance but also reduce the risk of injuries, leading to substantial savings on rehabilitation expenses (Naderi et al., 2020).

Integrating mindfulness into a player's routines does not have to be a logistical nightmare. Sessions can be seamlessly included alongside gym workouts and on-field training, enhancing attention, concentration, and emotional regulation (Norouzi et al., 2020). While coaches and staff have busy

schedules, trained psychologists can support the mindfulness initiatives by assessing and evaluating players' progress (Musculous, 2014).

Even in financially constrained environments, the benefits of mindfulness are accessible. Coaches can undergo MSPE training themselves, eliminating the need for external professionals (Minkler et al., 2021). As players experience the positive results of these programs, their confidence and commitment to mindfulness practices will grow, continuing even beyond the structured sessions (Minkler et al., 2021). When coaches and staff witness tangible improvements in both team cohesion and individual player performance, they are more likely to embrace and advocate for these programs (Minkler et al., 2021).

Mindfulness complements traditional training by enhancing the player's awareness, concentration, coping mechanisms, and emotional responses (Ivarsson et al., 2015). The use of scales like the Warwick-Edinburgh Mental Well-Being Scale (WEMWBS; Tennant et al., 2007) and Mindfulness Attention Awareness Scale (MAAS; Brown & Ryan, 2003) allow teams to monitor progress, leading to increased well-being, emotional regulation, and enhanced performance. Ultimately, mindfulness practices offer a holistic approach that benefits players on and off the field, proving to be an indispensable part of modern soccer training (Ivarsson et al., 2015).

In the end, various forms of mindfulness practices such as Psychological Skills Training (PST; Kerr & Gross, 1996), Mindfulness-Based Stress Reduction (MBSR; Norouzi, 2020), Mindfulness, Acceptance, and Commitment approach (MAC; Moore, 2009), and Mindful Sport Performance Enhancement Program (MSPE; Pineau et al., 2014) have been explored, showing their ability to significantly enhance performance of both current and retired soccer players across multiple domains. Teams can benefit from employing psychologists to further evaluate their players using tools like the Warwick-Edinburgh Mental Well-Being Scale (WEMWBS; Tennant, 2007) and the Mindfulness Attention Awareness Scale (MAAS; Brown & Ryan, 2003).

The benefits of mindfulness training include its ability to reduce anxiety, depression, and stress in current and retired players, and prevent injuries in players through practices such as focused breathing, meditation, and yoga. These programs can also be cost-effective alternatives to rehabilitating injured players. Moreover, mindfulness techniques can improve concentration through focused breathing and enhance a player's attentional capacity, flexibility, and adaptability, leading to quicker decision-making on and off the field.

Despite critics' skepticism, mindfulness training has the potential to enhance team performance by improving formation, tactics, cohesion, and players' ability to dominate space and time on the field. The significant benefits further stretch to retired players as they struggle with the transition away from their professional lives. By practicing forms of Mindfulness Based Stress Reduction (MBSR), players can find healthy outlets in forms of yoga and meditation to support emotional regulation. While it may seem that these techniques may not resonate with every player, teams that embrace the Mindfulness, Acceptance, Commitment (MAC)

and Mindful Sport Performance Enhancement (MSPE) approaches will see improvements in players' overall well-being, emotional responses, decreased anxiety and stress levels, and reduced injuries. Integrating these programs into current and retired soccer player's training programs and daily lives can have short-term and long-term benefits, enhancing their physical and mental health.

IX. DISCUSSION

Further research should consider using larger sample sizes and wider age ranges to study the benefits of mindfulness training. While the field of sports psychology is growing with a high demand for psychologists, mindfulness has an abundance of research; however, it has not been applied to sports performance and integration in training (Weir, 2018). Can mindfulness be the key to unlocking consistent performance and confidence in players when integrating it with physical training? Can mental training increase players' mental strength and resilience to help teams win? Will small factors such as meditation or focused breathing make athletes and teams more successful? Future research must explore these topics to aid athletes and ensure their longevity in their sport.

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