



Playing for Freedom: A Phenomenological Exploration Into Team Sports' Perceived Influence on PTSD Symptoms in Military Veterans

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RESEARCH

VIRGINIA TECH.
PUBLISHING

ABSTRACT

Guided by social cognitive theory, this qualitative study examines how participation in team sports shape PTSD symptoms and psychological well-being among military veterans. Using phenomenological interviews with eight veterans actively engaged in team sports, this study explored shifts in perceptions of PTSD and recovery. Findings indicate benefits veterans described as lifesaving, including attenuation of suicidal ideation, stronger peer support, and renewed identity and purpose. Team participation fostered a sense of belonging, structure, and accountability, which veterans linked to increased resilience and motivation to reengage with family, work, and community. The results suggest that team sports can function as a practical, community-based component of veteran care, complementing clinical services while remaining accessible and low-cost. Implications include designing inclusive programs that prioritize psychological safety, trust, and peer leadership, with routine assessment of engagement and perceived outcomes. This study contributes to veteran studies by foregrounding team sport as a structured, nonclinical intervention and by offering evidence to guide sport managers and support providers seeking to integrate sport with holistic models of care.

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KEYWORDS:

PTSD; team sports; veterans' mental health; social cognitive theory; veteran; sports

TO CITE THIS ARTICLE:

Ward, J. M. (2026). Playing for Freedom: A Phenomenological Exploration Into Team Sports' Perceived Influence on PTSD Symptoms in Military Veterans. *Journal of Veterans Studies*, 12(1), pp. 36–54. DOI: <https://doi.org/10.21061/jvs.v12i1.814>

Over the past 20 years, relentless global conflicts have led to numerous deployments of United States (U.S.) military personnel, and consequently, leaving many service members returning home burdened by profound psychological challenges (i.e., post-traumatic stress disorder [PTSD]). PTSD, an anxiety disorder that can manifest after witnessing or enduring trauma (American Psychiatric Association, 2022; American Psychological Association, 2013), has emerged as a significant public health crisis among U.S. veterans (Reisman, 2016), with hundreds of thousands Iraq and Afghanistan veterans seeking care and care from the Department of Veterans Affairs (VA). However, when seeking care, a frustrating reality persists; for example, long delays in accessing essential clinical services remain very common (Americans for Prosperity Foundation, 2022; Baillie et al., 2024). This underscores a critical and ongoing concern regarding the adequacy and accessibility of care for those who served (Reisman, 2016).

Understanding the impact of PTSD, which extends far beyond the psyche and can affect an individual's emotional well-being, physical health, and social interactions (Schnurr, 2023), is critical. While PTSD is not exclusive to military service members, veterans, especially those who have faced the realities of combat, experience markedly higher rates of symptoms compared to civilians (Chambliss et al., 2024). The journey toward healing can be daunting for these veterans as they navigate their transition from military life to civilian existence (Ein et al., 2024; Hitch et al., 2023). Findings from a survey conducted by the Wounded Warrior Project (2021) paint a stark picture of this challenge with a staggering three-quarters of surveyed veterans reporting experiencing PTSD symptoms, further highlighting the pervasive nature of this issue.

Many veterans grapple with significant barriers to accessing healthcare, including co-occurring injuries and illnesses, the intricate and often overwhelming bureaucracy of the VA system, and the lingering stigma surrounding mental health (Campbell et al., 2016; Ramalingam et al., 2023). As the rates of PTSD among veterans continue to rise (Hoppen & Morina, 2019) and the costs of treatment soar (Davis et al., 2022), there is a growing willingness to explore complementary, community-based interventions. Among these, participation in team sports emerges as a promising yet often overlooked avenue. Team sports are consistently linked to beneficial psychosocial outcomes (Olvhøj et al., 2022; Pluhar et al., 2019; Zuckerman et al., 2020), offering not just significant health advantages but also the potential for cost-effective solutions.

PROBLEM STATEMENT

U.S. veterans face profound psychological challenges post-service (Brooks & Greenberg, 2017; Kelly & Vogt, 2015). Despite the diagnostic complexities of individualized PTSD (American Psychological Association, 2013; Hruby et al., 2021), veterans carry an elevated risk for psychological disorders (Sommer et al., 2020; Stahlman & Oetting, 2018). Most literature remains limited by a focus on clinical symptomology, neglecting the social dimensions of recovery. Combat-exposed veterans are particularly vulnerable, experiencing higher trauma loads and PTSD severity than noncombat counterparts (Na et al., 2022). While team sports reportedly foster identity and camaraderie (Hendrick et al., 2024), a qualitative gap persists in understanding how combat veterans navigate these communal dynamics. The central problem is the lack of qualitative understanding of how team sports-based social environments influence PTSD recovery and identity reconstruction in combat veterans. This leaves the influence of the veteran's voice in sports-based social environments on PTSD recovery under-explored. Phenomenological inquiry is necessary to investigate how these lived experiences facilitate identity reconstruction and reconnection.

PURPOSE STATEMENT

The purpose of this qualitative study was to explore the lived experiences of combat veterans in team sports to understand how communal environments facilitate identity reconstruction and psychological recovery. By centering veteran perspectives, this research provides the necessary framework for developing tailored social interventions that address the specific, holistic needs of the veteran community.

OVERVIEW OF THE EXISTING LITERATURE

Post-traumatic stress disorder (PTSD) is a complex and often debilitating mental health condition that develops in the aftermath of traumatic experiences. Its history is characterized by ongoing debates and frequent shifts in diagnostic standards, societal understanding, and treatment approaches (Friedman, 2019, 2022; Friedman et al., 2021). While commonly linked to combat exposure, PTSD is not confined to military contexts, it can arise from a wide array of traumatic events that produce enduring

psychological strain (U.S. Department of Veterans Affairs, 2023). In the United States, PTSD represents a pervasive mental health concern among military veterans, often intensified by the unique stressors experienced during active duty. These stressors can include adverse environmental conditions and unpredictable deployment situations (Brooks & Greenberg, 2017; Kelly & Vogt, 2015; U.S. Department of Veterans Affairs, 2025).

The intricacies of PTSD are amplified by its diverse symptoms and the heightened susceptibility of veterans to psychological disorders compared to civilians (Hruby et al., 2021; Sommer et al., 2020; Stahlman & Oetting, 2018). Extensive research underscores the power of physical activity to alleviate symptoms of depression, anxiety, and loneliness (Pluhar et al., 2019; Singh et al., 2023; Zuckerman et al., 2020). Additionally, studies targeting veteran populations reveal that engaging in exercise can lead to marked improvements in psychological well-being and significant reductions in PTSD symptoms (Wheeler et al., 2020). Nonetheless, the unique influence of team sport participation, distinct from general physical activity, remains uncharted in veterans living with PTSD. The urgency and importance of exploring this avenue could unlock new pathways to healing and community connection for those who have served.

PHYSICAL ACTIVITY AND SPORTS INFLUENCE ON MENTAL HEALTH OUTCOMES

Since the American Psychiatric Association (APA) published the DSM-5 in 2013, a range of evidence-based interventions for PTSD has been developed (American Psychiatric Association [APA], 2022; Moore & Penk, 2019). However, the phenomenon of high dropout rates in these trauma-focused therapies continues to present a significant challenge (Kehle-Forbes et al., 2016). It is important to understand that the effectiveness of these treatments in reducing PTSD symptoms and improving patient outcomes can differ (Moore & Penk, 2019). Furthermore, an increasing body of evidence supports the use of nonclinical interventions and complementary wellness strategies as valuable methods for managing PTSD symptoms, opening up new and intriguing possibilities in the field.

Numerous recent studies have demonstrated the beneficial effects of physical activity and exercise programs on mental health within the general population (Ramos-Sanchez et al., 2021; Singh et al., 2023). Additionally, research has extended to investigating the impact of similar programs with military veterans (Reis et al., 2022; Wheeler et al., 2020; Zhao et al., 2025). Despite existing research examining the influence of physical activity on mental health outcomes for both veterans and civilians, a significant gap persists in the literature specifically

concerning the potential advantages of team sports for military veterans diagnosed with PTSD (Olvhøj et al., 2022; Pluhar et al., 2019; Zuckerman et al., 2020).

This investigation highlights the importance of distinguishing between “sport” and “physical activity,” as this distinction is essential for accurately interpreting and understanding research findings. Sport and physical activity, while intrinsically related, represent distinct constructs that exist along a continuum shaped by societal norms, advancements, and individual motivations. A person’s own interests and the societal context in which they operate play a significant role in this continuum (Malm et al., 2019; May, 2021; Piggin, 2020). Physical activity is fundamentally defined as any bodily movement that results in energy expenditure, encompassing a broad spectrum of activities that include exercise and training (Caspersen et al., 1985). In contrast, sport is characterized by its competitive nature, adherence to established rules, and organized formal events, which are often accompanied by performance statistics and media coverage (Bale et al., 2012; Hallmann & Giel, 2017; Levinson & Christensen, 1999; May, 2021). This differentiation highlights the varying intentions and institutional frameworks that govern participation in these two domains.

Research demonstrates that regular physical activity significantly alleviates symptoms of depression and anxiety among both veterans and non-veterans (Rosenbaum et al., 2015; Singh et al., 2023). These findings are vital as they provide a deeper understanding of the potential of including physical activity in mental health interventions. Although variances exist in long-term outcomes (Rosenbaum et al., 2015), recent evidence underscores the potential role of physical activity in mental health interventions (Invictus Games Foundation, 2024; Singh et al., 2023; Walter et al., 2023). Furthermore, these findings suggest that participation in team sports may notably enhance mental health outcomes for individuals with mental health disorders, including veterans contending with PTSD.

Team sports show significant potential in the treatment of PTSD in veterans. However, further empirical studies are needed to comprehensively evaluate their efficacy. A growing body of research highlights the benefits of physical activity and exercise for civilians dealing with PTSD and other mental health conditions (Knappe et al., 2019; Manger & Motta, 2005; Rosenbaum et al., 2015). It also indicates that participating in sports can meaningfully reduce mental health symptoms in adults who are not veterans (Eime et al., 2010; Eime et al., 2013a; Eime et al., 2013b). Additionally, studies show that physical activity boosts overall psychological well-being and effectively alleviates PTSD symptoms in veterans (Fetzner & Asmundson, 2014; Ley et al., 2017; McDonagh et al., 2024).

Investigations into the efficacy of team sports as an intervention for veterans living with PTSD underscore the necessity for a more comprehensive understanding of this approach. Recent research demonstrates that higher-intensity physical activities and team sports can significantly enhance mental well-being (Singh et al., 2023; Yuan et al., 2025). Furthermore, these studies emphasize that individuals engaged in team sports derive greater psychological benefits than those participating solely in individual sports, providing a promising outlook. These findings further corroborate earlier research, which posits team sports as a viable intervention for psychological disorders in the general population (Andersen et al., 2018; Pluhar et al., 2019; Zuckerman et al., 2020).

Recent studies have demonstrated that sport-based interventions, particularly those occurring in outdoor settings, are effective in significantly alleviating PTSD symptoms among veterans and improving their overall quality of life (Havlick et al., 2019; Townsend et al., 2018; Walter et al., 2023; Wheeler et al., 2020). Most key studies on physical activity and veterans with PTSD were conducted before 2021, highlighting the urgent need for updated research to explore these benefits more comprehensively. Research on civilian team sports shows unique therapeutic effects on well-being through teamwork, camaraderie, and belonging (Eather et al., 2023; Rhodes et al., 2024). Participants report higher life satisfaction and lower anxiety and depression than those engaged in individual activities (Pluhar et al., 2019). This suggests that veterans with PTSD could experience improved long-term quality of life and symptom reduction. Although the mental health benefits of physical activity are well-known (Singh et al., 2023; Walter et al., 2023), there remains a gap in studying how team sports specifically impact veterans' PTSD. Previous research has focused on broad sport for development or general well-being without addressing this group's particular needs (Inoue et al., 2020; Meir & Fletcher, 2017; Waldhauser et al., 2021). This current study fills that gap by exploring veterans' qualitative perceptions, providing a foundation for evidence-based programs that leverage team dynamics for psychosocial recovery and emphasizing the need for a structured theoretical framework to guide future research, policy, and veteran care interventions.

THEORETICAL FRAMEWORK

Social-Cognitive Theory (SCT), formulated by Albert Bandura (1976), serves as the guiding framework for this study because of its capacity to explain, anticipate, and promote behavioral alterations (Bandura, 2005). By integrating cognitive, behavioral, and emotional

frameworks, SCT facilitates practical application in PTSD rehabilitation (Benight & Bandura, 2004). Its versatility across disciplines—including mental health, sports (Smith & Smoll, 2006), and physical activity (Bandura, 2004; Beauchamp et al., 2019)—illustrates how prior behaviors and environmental contexts shape future outcomes (Wong & Monaghan, 2020). The theory's comprehensive constructs encompass internal cognition and self-efficacy, external social support, and behavior (Bandura, 1986, 2005; Bezner & Held Bradford, 2020), emphasizing that modification is contingent upon the real-world application of these elements (Bezner & Held Bradford, 2020). Consequently, SCT has influenced sports psychology (Michie et al., 2013) and PTSD treatment (Fletcher et al., 2017; Kaniasty & Norris, 2008; Park et al., 2021) while supporting holistic health maintenance (Thoits, 2010) and practical intervention strategies (Beauchamp et al., 2019). As theoretical validity depends on explanatory and predictive effectiveness in real-world contexts (Bandura, 2005), SCT is uniquely suited to investigate how the social and cognitive dimensions of team sports influence veterans with PTSD. Anchored in SCT, this phenomenological study addresses the literature gap regarding the social benefits of team sports for veterans with PTSD. By focusing on veterans' lived experiences, this research positions team sports as a transformative intervention with the potential to refine clinical practices and inform inclusive policymaking. Ultimately, this investigation provides a critical framework for enhancing veteran mental well-being through communal participation. The following research question guided this inquiry: How do military veterans perceive the influence of participation in team sports on their PTSD symptoms?

METHODS

This study examined the relationship between participation in team sports and the manifestation of PTSD symptoms in the context of military veterans. Recognizing the need for a more comprehensive understanding of veterans' lived experiences, this study utilized a qualitative approach. While prior studies provided valuable insights into interventions for veterans diagnosed with PTSD, the majority employed quantitative methods that predominantly rely on fixed-response checklists and inventories. Such methodologies often overlook unknown variables and fail to adequately capture the perspectives of veterans.

This study emphasized individual narratives and personal experiences, paralleling earlier studies of veterans at the Invictus Games in 2016, 2018, and 2022 (Invictus Games Foundation, 2024; Roberts et al., 2020). Additionally, this research not only examined how participation in

team sports settings affects the well-being and recovery trajectories of injured military personnel (Brittain et al., 2022) but also aimed to provide practical insights for the development of effective interventions for veterans.

This study employed a phenomenological design to examine veterans' perceptions of how team sports affect their PTSD symptoms. This application allowed the organic emergence of participants' lived experiences (Creswell & Poth, 2017), underscoring the significance of unique personal narratives (Moustakas, 1994). This investigation was anchored in the principles of social-cognitive theory (SCT), which promoted a thorough exploration and nuanced understanding of the veterans' experiences and perceptions related to PTSD (Vagle, 2018). Within the framework of this study, the qualitative phenomenological approach fostered an entirely interpretive process throughout all stages of the research, ensuring depth, rigor, and direct interpretation of the phenomenon as articulated by the veterans themselves.

In phenomenological research, the positionality of the lead researcher is paramount for identifying and addressing potential biases. The lead researcher, a male veteran within the designated age range who experiences PTSD and has a background in both team and individual sports, functions as an "insider." This unique perspective significantly shaped the study's design, extending beyond mere scholarly inquiry. This experiential background not only enhanced the understanding and interpretation of the data but also had the potential to bring to light insights that non-veteran researchers might overlook. Furthermore, it fostered an environment where participants felt empowered to share their authentic experiences, humor, and military vernacular without necessitating explanation. Trustworthiness was ensured by following Adler (2022) and Lincoln and Guba (1985). The lead researcher minimized bias by practicing thorough reflexivity, remaining committed to the core research goal, and conducting member checks. This process allowed findings to reflect participants' voices during coding, thereby strengthening each participant's contribution and confirming the study's emphasis on team sports as a PTSD intervention for veterans.

PARTICIPANT RECRUITMENT AND DEMOGRAPHICS

Participants in this study were selected through purposive sampling, which involves choosing individuals based on specific criteria (Creswell & Poth, 2017). Literature indicates that PTSD often appears as a chronic or delayed-onset condition rather than solely an acute disorder (Crocq & Crocq, 2000 (published online 2022)). Therefore, the eligibility criteria included being at least 35 years old, having been discharged from the military for at least

five years, self-reporting a clinical diagnosis of PTSD, and having participated in team sports within the past 3–5 years. Research was restricted to males, reflecting the significantly larger male veteran population (Schaeffer, 2023; U.S. Census Bureau, 2021) and their increased involvement in team sports (Statista, 2025; U.S. Census Bureau, 2021). Methodologically, this study prioritized a homogeneous sample to isolate the influence of team sports on combat-related PTSD. Female veterans often experience distinct trauma profiles, including significantly higher rates of military sexual trauma (MST), which introduce complex social and psychological variables requiring separate, specialized inquiry (Galovski et al., 2022). To maintain ethical boundaries within a non-clinical research scope (Shah, 2024) and ensure the depth of the phenomenological analysis, this study focused on the male combat experience. While this limits immediate generalizability to all veterans, it establishes a specific empirical baseline necessary for future comparative research. The unique experiences veterans encounter post-discharge offer critical insights into the effects of PTSD and the potential benefits derived from participation in team sports.

Following Institutional Review Board approval, a two-stage sampling strategy was utilized. Primary recruitment employed purposeful sampling through organizations offering veteran team sports. Subsequently, snowball sampling was implemented as a secondary technique to identify additional participants who met the specific inclusion criteria. This recruitment strategy facilitated the inclusion of veterans from across the U.S., capturing a broad spectrum of perspectives across various team sports and geographic locations to ensure thematic depth.

An initial recruitment email was sent to these organizations, then forwarded to potential participants interested in the study. These individuals later contacted the researcher for more information. A follow-up recruitment email was sent containing a demographic screening form and a scheduling sheet to facilitate interview selection. Recruitment efforts yielded responses from 42 potential participants. Ten individuals met the eligibility requirements; however, two did not attend their interviews or respond to subsequent follow-up, resulting in a final sample of eight participants ($n = 8$) who completed the semi-structured interviews. To protect participant identities, pseudonyms were assigned during the transcription phase (Table 1).

Eight participants are sufficient for this study, as data saturation occurred by the sixth interview and no new themes emerged afterward, consistent with guidelines for deep exploration of lived experiences in hard-to-reach

PARTICIPANT	AGE RANGE	SERVICE YEARS	SERVICE BRANCH	TEAM SPORTS PLAYED
Wiley	40–49	5–8	Marines	Golf, powerchair basketball
Jack	50+	5–8	Air Force	Para ice hockey, skiing
Harry	40–49	13+	Army	Powerchair football, wheelchair basketball, softball
Run	35–39	5–8	Army	Triathlon, iron man, kickboxing
Abner	50+	5–8	Navy	Water skiing, football, softball, archery
Tullimore	35–39	9–12	Army	Team MMA, jujitsu
Randy	50+	5–8	Marines	Skiing, cycling, swimming
Brubaker	35–39	4–8	Army	Softball, basketball, rugby

Table 1 Participant Screening and Eligibility Information.

populations (Creswell & Poth, 2017). Due to the sensitive nature of PTSD discussions and participants' hesitance to disclose personal trauma, recruiting these eight individuals took four months through targeted veteran sport organizations and snowball sampling, providing meaningful and reliable insights despite the small sample size.

DATA COLLECTION AND ANALYSIS

Virtual interviews were conducted and lasted between 45–90 minutes. Interviews were audio-recorded and transcribed, with each transcript and corresponding video reviewed multiple times to ensure data immersion. This process facilitated accurate interpretation and the development of detailed memos to capture personal expressions beyond the recording (Adler, 2022). The semi-structured interview guide, grounded in social-cognitive theory (SCT; Bandura, 2004) included questions about internal factors such as self-efficacy (e.g., How do you think participating in team sports has affected your mental health overall?) and external factors like social support (e.g., Describe the journey that led you to participate in team sports after your military service), along with perceptions of off-field influences of team sports. This method enabled exploration of how team environments shape behavior and perceptions.

SCT constructs guided axial coding to organize data into themes related to cognitive shifts, behavioral changes, and environmental influences, and were in line with triadic reciprocal determinism. Braun and Clarke's (2021) thematic analysis was used for coding, starting with line-by-line descriptive and in vivo coding to develop a codebook, followed by axial coding (Miles et al., 2018) and the identification of higher-level themes through constant comparison (Glaser, 1965) and narrative analysis (Labov & Waletzky, 1997), ensuring comprehensive pattern development (Saldana, 2021).

RESULTS

The existing body of research has examined the effects of physical activity and group interventions on mental health (Pluhar et al., 2019; Singh et al., 2023; Stubbs et al., 2017). However, the specific qualitative aspects of how team sports affect veterans with PTSD have yet to be explored. This study, guided by SCT, aimed to answer the research question: How do military veterans perceive the influence of participation in team sports on their PTSD symptoms? Three primary themes were identified: (a) the transformative power of team sports, (b) a holistic therapeutic effect, and (c) a reduction in suicidal thought. These themes align with and build upon the existing scholarship, providing fresh perspectives from long-term veterans that extend beyond previous findings (Singh et al., 2023; Stubbs et al., 2017).

THEME 1: TRANSFORMATIVE POWER OF TEAM SPORTS

A common experience among participants was their struggle to transition from military life and reintegrate into society. This challenge often resulted in unhealthy coping mechanisms, such as alcoholism and severe drug addiction. Prior research has underscored the transformative power of team sports (Atkinson & Young, 2008; Caddick & Smith, 2014; Walter et al., 2023). The findings in this study reveal that engaging in team sports not only provides a range of health benefits but also helps veterans forge a new identity, representing a significant personal transformation. The positive impact of team sports extends beyond improved physical and mental health, influencing their daily lives and instilling a renewed sense of meaning and purpose. These experiences underscore the vital role that organized team sports can play in the ongoing recovery and rehabilitation of veterans with PTSD, providing them with a sense of purpose and meaning that is often lost in the transition from military to civilian life.

Subtheme 1: A New Identity

The initial key insight was that participating in team sports played a significant role in reshaping veterans' sense of self-worth. Beyond the playing field, each participant experienced a gradual improvement in their mental well-being, influenced by the clarity, focus, and social dynamics of sports. This journey of self-discovery led them to form a "new" identity, marking significant personal growth. Harry's story is a testament to this positive change, stating:

I was trying to figure out how to do life again...team sports shifted my mentality from 'I can't do... to I can!...[it] changed my outlook on life. Now, I can do this and that. I now limit that negativity...look for and find positivity...[w]ithout team sports, I'd be sad and pathetic.

Jack shared a similar shift, adding, "Team sports has had an amazing influence on my journey with traumatic stress. My sense of purpose, ability to accomplish tasks, goals and my self-identity...Total change!" Randy relayed similar experiences, stating, "Team sports is helping me see myself as I used to. I'm a new person!...[it] allows me to feel normal again..." Wiley stated, "Getting that drive back is one of the most important things that team sports does...You start to get that vigor back that you that you lost." Tullamore encapsulated his new identity, stating, "Team sports helped with the rediscovery of my identity, my purpose and my meaning."

Subtheme 2: A Sense of Self-Confidence

Before embracing their new identities, the participants in this study faced challenges related to their self-esteem and the physical and mental hurdles posed by PTSD. However, after taking part in team sports, they discovered a boost in self-confidence that extended beyond their athletic skills. As Jack stated, "It has given me the ability and confidence to do things...There's no stopping me now! The biggest thing is self-confidence, the inspiration it gives you to compete [in life]." Randy shared a similar story, adding, "It's been very important showing me that I can accomplish things that I didn't think I could." Going into detail about his renewed zest for living, Abner remarked, "The experience of being on a team...not only the camaraderie, but the confidence, I live life on life's terms...You are now actually a part of society. You're not an outcast anymore!" Describing his experiences, Brubaker commented:

After I got out, I was alone and drinking every day.
After these leagues, the camaraderie, and learning

that I wouldn't be shunned...I started having confidence in other areas...I cut way back on my drinking, wound up going back to school...It's been a complete 180. All this ain't possible without those teams.

Wiley mirrored those sentiments, stating, "One of the most important things is that being on a team carries over into everyday life...The sports have reignited my competitive side for living."

Subtheme 3: Renewed "Life" Resilience

The third key discovery was that participants shared their newfound ability to confront and navigate setbacks and challenges in their daily lives. Harry noted:

I am able to let more issues roll off my back. Before the team sports, I would be pissed off at everything. Team sports has helped me. Now I will find a way! Resilience is the key to everything. If you don't have resiliency...you're going to get stuck.

Jack now handles adversity, stating, "I'm a warrior now! Team sports has helped me understand that about myself. Now I'm out here doing things 90% of the people my age wouldn't even try." Abner colorfully declared, "Ain't nothing gonna stop me now. I've learned, and I know, ain't shit gonna stop me now. Challenge accepted. Life accepted!"

THEME 2: HOLISTIC THERAPEUTIC EFFECT OF TEAM SPORTS

Participants shared in-depth reflections on their experiences with team sports and how these activities significantly contributed to their physical and mental health. They noted improvements in their overall well-being, a reduction in unhealthy coping strategies, and a perceived lessening of PTSD symptoms. Two clear subthemes were identified: (a) the concrete physical advantages of participating in team sports and (b) the abstract mental health benefits associated with them.

Subtheme #1: Physical Health Benefits

As the participants discovered comfort and mental stability both during and after their time back on the field, stories of development and empowerment unfolded. This was characterized not just by a reduction in clinical symptoms but also by a renewed commitment to personal excellence and self-improvement that was previously lacking. On the topic of benefits experienced on the field, Wiley mentioned, "Now, I've got the heart of a teenager...I'm not as injured as I am...It gets you out of the house and out of your comfort

zone...it pushes you. I have the best blood pressure I've had my entire life." Jack stated:

Team sports is its own treatment because it gets you out of the house. It gets you inspired, it gets you invigorated, you go and you sweat. You want to be better. You don't quit. Well, that's the military, you go to battle and compete, you're better together.

Tullamore echoed these sentiments, "It has improved me in all aspects...I eat clean, I'm not drinking. I used to be a real heavy drinker. It's decreased a lot."

Subtheme 2: Mental Health Benefits

Expanding on the physical advantages of team sports, some participants clearly noted numerous mental health benefits they linked directly to their engagement in team activities. Abner mentioned, "I used to have a lot of flashbacks, and they've gone down a lot since I've been involved in team sports. You realize you're not alone anymore. Everywhere you go, you're part of a team." Harry echoed this, stating, "If I have my little PTSD moments, I can take a step back. It's only temporary. I have healthy coping techniques which team sports taught me."

Wiley, reflecting on his journey, commented, "With team sports, you're not thinking about your PTSD. When that stuff happens, like anxiety, I know I have my team to support me... there's that incredible stress relief." Run remarked, "It's like a pressure release valve...it helps me to blow off stress and steam."

THEME 3: REDUCTION IN SUICIDAL THOUGHT

Besides the health advantages and a renewed sense of identity, team sports offered participants a deep sense of purpose for living. Each participant shared vivid accounts of how the relationships and structure that team sports provided transformed their lives and served as a critical support during their most challenging times. Jack reminisced about these experiences, stating, "I guarantee without team sports, I don't think I'd be here right now." Harry, looking back to his early days of living with PTSD, mirrored Jack's thoughts, "Team sports helped me get out of those bumps I was in when I was going through everything...huge...one of the reasons that I didn't commit suicide." Wiley, after great reflection and with a shaky voice, summarized his experience, stating, "Without those team sports, I honestly can't tell you I'd still be around... Had I not joined a team and found the right one, I can't tell you where I am at or...*IF*...I was so close to that edge [suicide]."

Abner, going into vivid detail, commented:

You can't do it on your own. I tried for years. It just don't work...I went to drugs and alcohol. I was addicted to heroin... OD'd four times, maybe more. I got into sports... been 19 years, and I'm still clean! I'm out there doing something constructive instead of destructive. without team sports...you know... [makes a knife to the throat motion].

Randy, contemplating the correct words, remarked, "It's lifesaving. There's a lot of days where the thought [suicide] enters my mind, and having social support from the relationships and better friends from team sports helps me overcome that during those moments." Choosing his words carefully, Tullamore stated, "Without it I don't think I'd be here today." Uniformly, each participant described team sports as a central supportive structure during their most challenging times, directly linking it to their survival, continued quality of life, and well-being.

THEME 4: TEAM SPORTS AS A POSSIBLE INTERVENTION

The final theme that arose from discussions was the belief that engaging consistently in team sports could effectively alleviate symptoms of PTSD. Harry mentioned, "All the sports is what helped me...It was *HUGE*. Run also spoke, at length, about the holistic possibilities:

Team sports, it's not a panacea, like it's not going to absolutely cure the trauma...nothing will, but it's a tool in a tool belt. Approaching and understanding that is a part of the bigger picture of treatment...The potential is *EXTREMELY* high for a lot of good.

Regarding his experiences, Randy lamented, "Until team sports, I didn't find an effective way to manage it [PTSD]. With team sports, it is better than *ANY* pill the VA could give me. That [team sports] should be a big part of treatment." Abner, as colorful as ever, echoed Randy's comments:

I strongly suggest people get into team sports because that's *THE* way to get your mental [health] on track...They're [doctor's] trying too much drugs. Their answer is, 'I'll just dope you up more,' It's better than therapy, You're outside the hospital... you're no longer saying, 'I got to go to fucking therapy.' Now you say, 'Oh, wait, we're going out?! Let's go!' There's a *BIG* difference.

Jack, less colorful than Abner but no less steadfast, sums up the overall influence of team sports, adding:

My group therapy is my teams...that's the best medicine to me...the *BEST* rush!! We all understand how we can make each other better. The training I do for sports are better than any medicine ANY doctor could ever give me. You choose a sport and then that becomes your therapy. It can really be a very productive treatment.

DISCUSSION

This research examined the question: How do military veterans perceive the influence of participation in team sports on their PTSD symptoms? Through the SCT framework, the study revealed four key findings: (a) the transformative power of team sports, (b) a holistic therapeutic effect of team sports, (c) reduction in suicidal thought, and (d) the potential of team sports as a possible intervention. Each theme delivers valuable insights into how team sports can significantly affect the mental health of veterans living with PTSD.

FINDING 1: TRANSFORMATIVE POWER OF TEAM SPORTS

A growing awareness of the “transformative power of sport” has recently gained prominence (Inoue et al., 2020; Meir & Fletcher, 2017; Spaaij et al., 2016), which Inoue et al. (2020) described as improving well-being for both sport consumers and participants, a notion strongly supported by this study’s findings. The participants often shared how team sports had a deep psychological impact that extended beyond the playing field, affecting nearly every aspect of their lives, especially their mental health and overall well-being—arguably one of the most significant insights. This is consistent with recent data from the Invictus Games Foundation (2024), Singh et al. (2023), and Walter et al. (2023), as well as earlier research (Knappe et al., 2019; Manger & Motta, 2005; Rosenbaum et al., 2015). The findings add to the existing literature by showing how all the participating veterans experienced a newfound sense of meaning, appreciation, and purpose in life after their involvement, representing a meaningful change considering their post-military challenges.

Veterans encountered considerable obstacles when transitioning from military service and reintegrating into civilian life, including mental health issues, physical ailments, and social skills such as small talk (Hoppen et al., 2021; Hruby et al., 2021). However, ongoing participation in team sports facilitated a gradual transformation: helping them shed labels, redefine their identities, and rebuild self-confidence—topics that all participants actively discussed. This new insight demonstrates that consistent engagement

in team sports supports sustainable recovery and reduces PTSD symptoms. The development of a “new identity,” purpose, and confidence over two to three years of regular involvement transformed their outlooks, enabling better navigation of social interactions and fostering resilience (American Psychological Association, 2018; Bezner & Held Bradford, 2020). As Horigian and colleagues (2020) emphasized, without participation in team sports, veterans are likely to face significant personal and social isolation.

This positive long-term effect on psychosocial well-being likely stems from the learning process, the challenges faced, and the structured nature of team sports, which helped the participants build confidence in overcoming obstacles. These results support the discussion on the mental health benefits of physical activity (Knappe et al., 2019; Singh et al., 2023; Walter et al., 2023) and add to existing research by highlighting how regular participation in team sports specifically aids veterans’ mental health recovery, providing a solid basis for future studies.

FINDING 2: HEALTH BENEFITS OF TEAM SPORTS

This research supports the well-established physiological benefits of physical activity (Malm et al., 2019). Every participant mentioned several physical benefits, such as weight loss, greater muscular strength and endurance, and improved cardiovascular health. The interviews also revealed numerous intangible mental health benefits, with participants expressing how participating in team sports motivated them to strive for excellence both on the field and in everyday life.

This transformative experience allowed them to shift from the conventional portrayal of veterans struggling with PTSD to embracing the identity of warriors, as participants Jack and Abner did. This change fostered a deep sense of personal responsibility and duty, aligning with findings from previous studies (Choi et al., 2019; Erickson et al., 2011; Silverman & Deuster, 2014), which highlight their steadfast dedication to improving both their physical and mental well-being. Participants noted significant enhancements in self-efficacy and mental resilience, which they attributed to their participation in team sports. All eight participants reported a notable decrease in substance misuse, linking this positive shift to their new outlook on life. Participants abstained from drugs and moderated their alcohol consumption, reserving it for celebratory events, such as championships, while avoiding binge drinking.

Additionally, the participants reported reductions in PTSD symptoms as perhaps the most notable outcome of their ongoing participation in team sports. These reductions were evident in various ways: fewer flashbacks and nightmares, clearer thinking, refraining from catastrophizing PTSD moments, improved memory recall, no longer requiring

medication for sleep, and, most crucially, avoiding engaging in destructive PTSD thoughts or the phenomenon referred to by participant Wiley as ‘PTSD one-itis,’ which can result in self-destructive behaviors. These results align with existing research highlighting the significant positive impact of physical activity and exercise in alleviating anxiety and depression disorders (Knappe et al., 2019; Rosenbaum et al., 2015; Singh et al., 2023). Furthermore, these findings support studies demonstrating the role of physical activity and sports in mitigating PTSD symptoms among military veterans (Knappe et al., 2019; Manger & Motta, 2005; Rosenbaum et al., 2015). This research offers new insights into how participation in team sports can benefit veterans coping with PTSD.

FINDING 3: TEAM SPORTS AS A LIFESAVING ANCHOR

Understanding the physiological and psychological health benefits played an essential role in the personal transformations experienced by the participants in this study, leading to the formation of a new identity. The study also uncovered an unexpected finding: the lifesaving impact of team sports. Each participant reported that ongoing participation acted as a critical lifesaving factor. This involvement helped them combat suicidal thoughts (Shaw, 2020; Teo et al., 2018) and confront other serious issues like substance abuse and social withdrawal (Averill et al., 2021; Kline et al., 2021; Li et al., 2022). Given its importance, this lifesaving aspect warrants specific attention, alongside its broader benefits for mental health.

Research has examined the impact of PTSD on veterans in both clinical (Bustamante et al., 2021; Friedman, 2022; Korte et al., 2021; Schnurr, 2023) and sports (Browne et al., 2021; Hegberg et al., 2019; Pluhar et al., 2019) settings. Studies indicate that engaging in exercise and physical activity may help alleviate symptoms of traumatic stress in veterans who live with PTSD (Knappe et al., 2019; Ley et al., 2017). This study supports and extends that literature. However, notably, team sports as an intervention for reducing suicidal ideation represents a departure from established discourse.

Each participant shared spontaneous insights about how they felt they were alive because they participated in team sports. The significant factors behind this improvement included fostering social connections and friendships, drawing parallels between team sports and military experiences, finding the right team, and reconnecting with their identities prior to the onset of PTSD. Despite various perspectives, every participant emphasized the importance of social support as a standard component. This finding is consistent with previous research showing that many veterans dealing with traumatic stress often feel isolated,

which can increase the risk of suicidal thoughts (Elbogen et al., 2020; Kachadourian et al., 2019; Teo et al., 2018).

The experience of participating in team sports transcended simply meeting people or forming friendships. Consistent with prior studies (Caddick et al., 2015; Eather et al., 2023; Waldhauser et al., 2021), participants reported significant improvements in their overall well-being, extending beyond sports. A key insight from this study is that they directly associated their renewed zest for life with the camaraderie they found on the field. Participants expressed feelings of support, a sense of belonging to a ‘family,’ and a feeling of safety; for them, team sports became their ‘home.’ By relying on teammates for guidance, assistance, and conversation, they realized they did not have to face life’s challenges alone. Over time, they also learned to trust civilians, building relationships gradually. They transitioned from isolation to forming friendships, romantic partnerships, and families. For these veterans, the most remarkable outcome was a self-reported absence of suicidal thoughts and self-destructive behavior. The shift from the stereotype of a veteran plagued by PTSD to thriving individuals and dedicated family men was truly exceptional.

FINDING 4: TEAM SPORTS AS A HOLISTIC INTERVENTION

Previous research has emphasized the benefits of physical activity (Knappe et al., 2019; Rosenbaum et al., 2015; Singh et al., 2023) and sports programs (Hawkins et al., 2011; Lawrence et al., 2010; Walter et al., 2023) in reducing PTSD symptoms, highlighting improvements in physical health and mental well-being. This study’s findings differ from earlier research, however, as veterans indicated that engaging in team sports was crucial for their ongoing PTSD recovery. Each participant highlighted the overall impact of team sports in alleviating traumatic stress, beyond just targeting specific symptoms like anxiety (Pluhar et al., 2019). All participants emphasized the importance of social support within team dynamics, aligning with findings by Morgan et al. (2019), Shah et al. (2022), and Waldhauser et al. (2021).

The study underscores how social support and team cohesion boost psychological health and community involvement. Participants mentioned that team sports offered a tangible way to reduce stress, whether by hitting a baseball, sacking a quarterback, or throwing a pass. These findings support recent studies on the mental health advantages of physical activity (Invictus Games Foundation, 2024; Singh et al., 2023; Walter et al., 2023), which observed reductions in anxiety, stress, depression, and mood disorders. While earlier research established the foundation for understanding these benefits, this

study extends those insights by examining how team sports influence perceived PTSD symptoms. The outcomes are encouraging, with all participants reporting a notable decrease in PTSD-related symptoms such as flashbacks, intrusive thoughts, emotional numbness, self-destructive behaviors, suicidal ideation, and avoidance. Additionally, these results offer new insight into the therapeutic potential of physical activity within mental health treatment.

Several participants highlighted how participating in team sports was more effective for them than any medication or therapy the VA provided. Many noted that healthcare providers frequently resorted to prescribing medication without adequately exploring other options. Participants unanimously agreed that incorporating team sports into a comprehensive treatment approach is essential for veterans with PTSD, especially during early diagnosis and military transition. The study's findings suggest that adding team sports to treatment plans not only boosts mental health but also establishes a foundation for organized, community-based interventions. This research underscores the therapeutic benefits of team sports and supports their official inclusion as strategies for veteran care. This is the first study, based on the author's doctoral dissertation (Ward, 2024), to examine how team sports influence PTSD symptoms, indicating that team sports may serve as a practical and accessible intervention for practitioners.

The findings of this study emphasize the potential of team sports as an effective method for improving mental health support for veterans. They add to the existing research by offering new insights and stressing the significance of nonclinical, community-based strategies. This study underscores the necessity for further investigation into how structured team sports can be systematically incorporated into holistic care to better support veterans' mental well-being.

THEORETICAL AND PRACTICAL IMPLICATIONS

This study expands social-cognitive theory in veteran research by showing how team sports can boost self-efficacy, social support, and behavioral change among veterans with PTSD. It builds on existing scholarship that considers sport a valuable tool for promoting health and fostering community (Inoue et al., 2020; Waldhauser et al., 2021). The findings suggest that practitioners should incorporate structured team sports into veteran programs to enhance resilience and lower suicidal ideation. Partnerships with organizations like the VA are

recommended to develop accessible, inclusive initiatives, positioning veteran practitioners as leaders in mental health support (Brittain et al., 2022; Meir & Fletcher, 2017).

This study's findings emphasize the advantages of participating in team sports for relieving PTSD symptoms in military veterans. Participants reported a notable decrease in PTSD symptoms, greater social support, and improved overall well-being. Prior research has shown that treating veterans with PTSD can be challenging (Resick et al., 2017; Steenkamp et al., 2015) and that they often face unique obstacles in accessing treatment (Kazlauskas, 2017; Patterson, 2022; Rafferty et al., 2020). This highlights the need to create and execute team sports programs tailored to meet the specific needs and experiences of all veterans. These programs should be open to all veterans, regardless of background or ability, ensuring accessibility despite physical, mental, or logistical challenges. Furthermore, including peer-support components, such as team-building exercises, can promote camaraderie and strengthen resilience, which enhances the benefits of these programs. It is also essential to offer flexibility in scheduling and locations to meet the varied lifestyles and obligations of veterans. As one participant stated, "[t]he best thing to do is to meet veterans where they are."

Veteran sports programs should emphasize team sports through three key priorities: staff training focused on PTSD symptomology, fostering peer support within teams, and maintaining ongoing evaluation. Coaches, staff, and veteran practitioners should be trained on an ongoing basis in psychological safety, trust-building, active listening, crisis recognition, cultural competence regarding military backgrounds, and awareness of mental health resources. Program structures should incorporate predictable routines, clear roles, and inclusive norms to promote cohesion. Regular monitoring of participation, retention, and self-reported well-being can inform continuous improvements.

In this study, veterans consistently highlighted that although participating in team sports offers notable benefits, veteran-focused sports organizations should combine these activities with other interventions to address the complex needs of veterans with PTSD. Incorporating team sports into mental health treatment plans can substantially improve therapeutic outcomes for veterans. As this study's findings indicate, engaging in team sports can help alleviate stress, elevate mood, and improve mental well-being. Merging team sports with established evidence-based treatments can create a holistic approach tailored to veterans, acknowledging the link between physical and mental health while utilizing the benefits of team sports to facilitate recovery, ultimately leading to improved health outcomes for veterans living with PTSD.

DIRECTIONS FOR FUTURE RESEARCH

Given this emerging area, many aspects still need investigation to understand how team sports can help military veterans with PTSD. This study provides a foundation for future research and highlights four main priorities. Collectively, these efforts can improve understanding of the underlying mechanisms, offer clearer guidance for implementation, and help create sport programs that are practical, inclusive, and tailored to veterans' needs.

Future researchers could begin by evaluating the long-term impact of team sports. Participants noted that effects develop gradually rather than instantly. Conducting longitudinal studies that track veterans throughout a season and into future seasons or years can illustrate patterns of change and the lasting nature of these effects.

Second, perform comparative research across various team sports and settings to assess how they differently impact PTSD symptoms. These analyses should account for factors such as the sport type, environment (e.g., urban vs. rural, indoor vs. outdoor, seasonal variations), and participant demographics, including age, race, gender, ethnicity, as well as military-specific details like branch, deployment history, job roles, and duty stations. Such comparisons will help identify the conditions and populations for which team sports are most beneficial.

Third, assess how team sports complement clinical evidence-based treatments. Research should explore the combined and sequential impacts of team sports alongside therapies such as cognitive-behavioral therapy, eye movement desensitization and reprocessing, group therapy, serotonin-selective reuptake inhibitors, and other methods. This will help in developing personalized and comprehensive treatment plans for veterans. Fourth, consider technology-enhanced access for people who cannot participate in traditional sports because of physical, mental, or logistical challenges. Virtual reality and augmented reality apps with adaptive machine learning can imitate aspects of team sports experiences at home. Studies should assess how practical, acceptable, fair, and beneficial these solutions are for mental health.

LIMITATIONS

This study has several limitations. The all-male sample ($n = 8$) is a significant constraint because it excludes female veterans who may encounter unique PTSD challenges, such as military sexual trauma or gender-specific barriers to sports. This homogeneity restricts how broadly the findings can be applied, especially given the phenomenological emphasis on varied lived experiences. Recruiting only eight participants over four months, despite efforts like

targeted outreach through veteran sport organizations and snowball sampling, highlights how difficult it is to engage veterans living with PTSD, who often face stigma, mistrust of research, or logistical hurdles in sharing personal stories.

The lead researcher was a male veteran with PTSD, which probably helped build trust and openness with participants. However, this might have also led to recruiting mainly individuals from similar backgrounds, limiting the variety of perspectives. Although reflexivity measures were used, the researcher's insider status could have subtly influenced how the data was interpreted. Future studies should focus on gender-inclusive recruitment by partnering with organizations like Women Veterans Interactive and include a broader range of voices to better understand gender-specific dynamics in team sports.

Recruitment challenges reveal systemic obstacles to reaching hard-to-access veteran groups, especially those with chronic PTSD. Geographic spread, limited access to adaptive sports, and differing comfort levels with research participation likely limited sample diversity. Although purposive and snowball sampling suited this exploratory study, they may have reinforced existing networks, overlooking veterans outside these circles. Future research might adopt mixed methods, such as combining qualitative interviews with larger quantitative surveys distributed via VA networks or online platforms, to gather a broader spectrum of experiences. Including adapted sports programs specifically designed for veterans with physical or mental health challenges can also enhance participation and ensure that findings reflect the diverse needs of the veteran community.

Lastly, although this study focused on in-depth analysis rather than broad scope, the small, homogeneous sample and use of qualitative methods restrict the ability to generalize the results. Future studies should employ longitudinal approaches and include larger, more varied samples to improve validity and broader applicability within veteran groups.

CONCLUSION

This study, utilizing social cognitive theory, explored how team sports significantly affect PTSD symptoms and improve psychological well-being among military veterans. In-depth phenomenological interviews with eight veterans involved in team sports revealed transformative changes in how they view PTSD and recovery, highlighting the potential benefits of integrating team sports into veteran mental health treatments. The findings reveal remarkable benefits that veterans described as truly lifesaving, including a significant reduction in suicidal thoughts, the strengthening of peer support networks, and a revitalized sense of identity and purpose. Participation in team sports not only cultivated a deep sense of belonging but also

instilled structure and accountability in their lives. Veterans credited these experiences with boosting their resilience and igniting a renewed motivation to reconnect with their families, careers, and communities.

These results suggest that team sports play a vital role as a community-based component of veteran care, serving as a complementary resource to clinical services. Importantly, they remain accessible and cost-effective, reassuring stakeholders about the practicality of this approach. This study highlights the importance of developing inclusive programs that focus on psychological safety, build trust, and promote peer leadership. Additionally, it emphasizes the need for ongoing evaluations of participant engagement and perceived results.

ETHICS AND CONSENT

Ethical approval for this study was obtained from the University of Louisville IRB # 23.0569.

ACKNOWLEDGEMENTS

I want to express deep gratitude to the veterans who shared their experiences, making this research possible. Appreciation is also extended to the organizations that assisted with participant recruitment through informational outreach. This article is based on my doctoral dissertation, *Safe at home: A phenomenological exploration into team sports' perceived influence on PTSD symptoms in military veterans* and I sincerely appreciate the valuable insights and guidance provided by my dissertation committee throughout this research.

COMPETING INTERESTS

The author declares no financial conflicts of interest related to this study. No funding was received. Several organizations assisted with recruitment, and the lead author is a military veteran with a research focus on PTSD. These connections are disclosed to maintain transparency in interpretation and reporting.

AUTHOR NOTE

This research is derived from a published dissertation (Ward, 2024), which examined team sports as an intervention for post-traumatic stress disorder (PTSD) and emphasized the importance of understanding conditions historical

development. This historical context enhanced the understanding of PTSD and suggested potential directions for future research and effective interventions tailored for military veterans.

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REFERENCES

- Adler, R. F.** (2022). Trustworthiness in qualitative research. *Journal of Human Lactation*, 38(4), 598–602. <https://doi.org/10.1177/08903344221116620>
- American Psychiatric Association.** (2022). *Diagnostic and Statistical Manual of Mental Disorders: DSM-5-TR*. APA. <https://doi.org/10.1176/appi.books.9780890425787>
- American Psychological Association.** (2013). *Diagnostic and statistical manual of mental disorders, 5th edition* (5th ed.). American Psychiatric Publishing. <https://doi.org/10.1176/appi.books.9780890425596>
- American Psychological Association.** (2018). *Resilience*. APA Dictionary of Psychology. <https://dictionary.apa.org/resilience>
- Americans for Prosperity Foundation.** (2022, January 28). More evidence the VA is improperly delaying or denying community care to eligible veterans. *Americans for Prosperity*. <https://americansforprosperity.org/va-denying-delaying-care/>
- Andersen, M. H., Ottesen, L., & Thing, L. F.** (2018). The social and psychological health outcomes of team sport participation in adults: An integrative review of research. *Scandinavian Journal of Public Health*, 47(8), 832–850. <https://doi.org/10.1177/1403494818791405>
- Atkinson, M., & Young, K.** (Eds.) (2008). *Tribal Play: Subcultural Journeys through sport*. In *Medical Entomology and Zoology* (Vol. 4). Emerald Group Publishing. <http://ci.nii.ac.jp/ncid/BA87420304>
- Averill, L. A., Averill, C. L., Pietrzak, R. H., Charney, D. S., & Southwick, S. M.** (2021). Psychoneurobiology of resilience. In M. J. Friedman, P. P. Schnurr, & T. M. Keane (Eds.), *Handbook of PTSD* (3rd ed., pp. 551–569). Guilford Press.
- Baillie, T., Gardner, P., & Church, H.** (2024). Delays in treatment initiation for post-traumatic stress disorder in the Canadian Armed Forces: a scoping review. *Journal of Military Veteran and Family Health*, 10(3), 2–15. <https://doi.org/10.3138/jmvfh-2023-0029>
- Bale, J., Cheska, A., Chick, G., Guttman, A., Holt, R., Kyle, D. G., Jr., J. L. W., Park, R., Christensen, K., & Levinson, D.** (2012). *Encyclopedia of world sport: From ancient times to the present*. Berkshire Publishing.

- Bandura, A.** (1976). *Social learning theory* (1st ed.). Prentice-Hall.
- Bandura, A.** (1986). *Social foundations of thought and action: A social cognitive theory* (1st ed.). Prentice Hall.
- Bandura, A.** (2004). Health promotion by social cognitive means. *Health Education Behavior*, 31(2), 143–164. <https://doi.org/10.1177/1090198104263660>
- Bandura, A.** (2005). The evolution of social cognitive theory. In K. G. Smith & M. A. Hitt (Eds.), *Great minds in management* (pp. 9–35). Oxford University Press.
- Beauchamp, M. R., Crawford, K. D., & Jackson, B.** (2019). Social cognitive theory and physical activity: Mechanisms of behavior change, critique, and legacy. *Psychology of Sport and Exercise*, 42, 110–117. <https://doi.org/10.1016/j.psychsport.2018.11.009>
- Benight, C. C., & Bandura, A.** (2004). Social cognitive theory of post-traumatic recovery: The role of perceived self-efficacy. *Behaviour Research and Therapy*, 42(10), 1129–1148. <https://doi.org/10.1016/j.brat.2003.08.008>
- Bezner, J. R., & Held Bradford, E. C.** (2020). Integrating health promotion and wellness into neurorehabilitation. In R. T. Lazaro, S. G. Reina-Guerra, & M. U. Quiben (Eds.), *Uphred's neurological rehabilitation* (7th ed., Vol. 33, pp. 938–952). Elsevier.
- Braun, V., & Clarke, V.** (2021). *Thematic analysis: A practical guide*. SAGE. https://doi.org/10.1007/978-3-319-69909-7_3470-2
- Brittain, I., Bunds, K., & Bocarro, J.** (2022). The contribution of sport in the rehabilitation process of disabled military veterans: A case study of the 2016 Invictus Games. *Journal of Global Sport Management*, 1–24. <https://doi.org/10.1080/24704067.2022.2031249>
- Brooks, S. K., & Greenberg, N.** (2017). Non-deployment factors affecting psychological well-being in military personnel: Literature review. *Journal of Mental Health*, 27(1), 80–90. <https://doi.org/10.1080/09638237.2016.1276536>
- Browne, J., Medenblik, A., Pebole, M., Gregg, J. J., & Hall, K. S.** (2021). Qualitative analysis of a supervised exercise program for older veterans with PTSD. *The American Journal of Geriatric Psychiatry*, 29(6), 565–572. <https://doi.org/10.1016/j.jagp.2020.10.014>
- Bustamante, D., Bountress, K., Sheerin, C., Koenen, K. C., Guffanti, G., Yan, L., Haloossim, M., Uddin, M., Nugent, N., & Amstadter, A. B.** (2021). Genetics of PTSD. In M. J. Friedman, P. P. Schnurr, & T. M. Keane (Eds.), *Handbook of PTSD* (3rd ed., pp. 192–210). The Guilford Press.
- Caddick, N., & Smith, B.** (2014). The impact of sport and physical activity on the well-being of combat veterans: A systematic review. *Psychology of Sport and Exercise*, 15(1), 9–18. <https://doi.org/10.1016/j.psychsport.2013.09.011>
- Caddick, N., Smith, B., & Phoenix, C.** (2015). The effects of surfing and the natural environment on the Well-Being of combat veterans. *Qualitative Health Research*, 25(1), 76–86. <https://doi.org/10.1177/1049732314549477>
- Campbell, D. G., Bonner, L. M., Bolkan, C. R., Lanto, A. B., Zivin, K., Waltz, T. J., Klap, R., Rubenstein, L. V., & Chaney, E. F.** (2016). Stigma predicts treatment preferences and care engagement among veterans affairs primary care patients with depression. *Annals of Behavioral Medicine*, 50(4), 533–544. <https://doi.org/10.1007/s12160-016-9780-1>
- Caspersen, C. J., Powell, K. E., & Christenson, G. M.** (1985). Physical activity, exercise, and physical fitness: Definitions and distinctions for health-related research. *Public Health Rep.* 100, 126–131.
- Chambliss, T., Hsu, J., & Chen, M.** (2024). Post-traumatic Stress Disorder in Veterans: A Concept Analysis. *Behavioral Sciences*, 14(6), 485. <https://doi.org/10.3390/bs14060485>
- Choi, K. W., Zheutlin, A. B., Karlson, R. A., Wang, M., Dunn, E. C., Stein, M. B., Karlson, E. W., & Smoller, J. W.** (2019). Physical activity offsets genetic risk for incident depression assessed via electronic health records in a biobank cohort study. *Depression and Anxiety*, 37(2), 106–114. <https://doi.org/10.1002/da.22967>
- Creswell, J. W., & Poth, C.** (2017). *Qualitative inquiry and research design: Choosing among five approaches*. https://openlibrary.org/books/OL28633749M/Qualitative_Inquiry_and_Research_Design
- Crocq, M. A., & Crocq, L.** (2022). From shell shock and war neurosis to post-traumatic stress disorder: A history of psychotraumatology. *Dialogues in Clinical Neuroscience*, 2(1), 47–55. <https://doi.org/10.31887/dcns.2000.2.1/macrocq>
- Davis, L. L., Schein, J., Cloutier, M., Gagnon-Sanschagrin, P., Maitland, J., Urganus, A., Guerin, A., Lefebvre, P., & Houle, C. R.** (2022). The economic burden of post-traumatic stress disorder in the united states from a societal perspective. *The Journal of Clinical Psychiatry*, 83(3). <https://doi.org/10.4088/jcp.21m14116>
- Eather, N., Wade, L., Pankowiak, A., & Eime, R.** (2023). The Impact of sports participation on mental health and social Outcomes in Adults: A systematic review and the 'Mental Health Through Sport' Conceptual model. *Systematic Reviews*, 12(1). <https://doi.org/10.1186/s13643-023-02264-8>
- Eime, R., Harvey, J., Brown, W., & Payne, W.** (2010). Does sports club participation contribute to Health-Related quality of life? *Medicine & Science in Sports & Exercise*, 42(5), 1022–1028. <https://doi.org/10.1249/mss.0b013e3181c3adaa>
- Eime, R., Young, J., Harvey, J., & Payne, W.** (2013a). Psychological and social benefits of sport participation: The development of health through sport conceptual model. *Journal of Science and Medicine in Sport*, 16, e79–e80. <https://doi.org/10.1016/j.jsams.2013.10.190>
- Eime, R., Young, J. A., Harvey, J. T., Charity, M. J., & Payne, W. R.** (2013b). A systematic review of the psychological and

- social benefits of participation in sport for adults: Informing development of a conceptual model of health through sport. *International Journal of Behavioral Nutrition and Physical Activity*, 10(1), 135. <https://doi.org/10.1186/1479-5868-10-135>
- Ein, N., Gervasio, J., St Cyr, K., Liu, J. J. W., Baker, C., Nazarov, A., & Richardson, J. D.** (2024). A rapid review of the barriers and facilitators of mental health service access among veterans and their families. *Frontiers in Health Services*, 4, 1426202. <https://doi.org/10.3389/frhs.2024.1426202>
- Elbogen, E. B., Molloy, K., Wagner, H. R., Kimbrel, N. A., Beckham, J. C., Van Male, L., Leinbach, J., & Bradford, D. W.** (2020). Psychosocial protective factors and suicidal ideation: Results from a national longitudinal study of veterans. *Journal of Affective Disorders*, 260, 703–709. <https://doi.org/10.1016/j.jad.2019.09.062>
- Erickson, K. I., Voss, M. W., Prakash, R. S., Basak, C., Szabo, A., Chaddock, L., Kim, J. S., Heo, S., Alves, H., White, S. M., Wojcicki, T. R., Mailey, E., Vieira, V. J., Martin, S. A., Pence, B. D., Woods, J. A., McAuley, E., & Kramer, A. F.** (2011). Exercise training increases size of hippocampus and improves memory. *Proceedings of the National Academy of Sciences*, 108(7), 3017–3022. <https://doi.org/10.1073/pnas.1015950108>
- Fetzner, M. G., & Asmundson, G. J.** (2014). Aerobic exercise reduces symptoms of post-traumatic stress disorder: A randomized controlled trial. *Cognitive Behaviour Therapy*, 44(4), 301–313. <https://doi.org/10.1080/16506073.2014.916745>
- Fletcher, S., Elklit, A., Shevlin, M., & Armour, C.** (2017). Predictors of PTSD treatment response trajectories in a sample of childhood sexual abuse survivors: The roles of social support, coping, and PTSD symptom clusters. *Journal of Interpersonal Violence*, 36(3–4), 1283–1307. <https://doi.org/10.1177/0886260517741212>
- Friedman, M. J.** (2019, October 14). *PTSD history and overview*. Veteran's Affairs. https://www.ptsd.va.gov/professional/treat/essentials/history_ptsd.asp
- Friedman, M. J.** (2022, March 22). *History of PTSD in veterans: Civil war to DSM-5*. Veteran's Affairs. https://www.ptsd.va.gov/understand/what/history_ptsd.asp
- Friedman, M. J., Schnurr, P. P., & Keane, T. M.** (2021). PTSD from DSM-III to DSM-5: Progress and challenges. In *Handbook of PTSD* (3rd ed., pp. 3–18). Guilford Publications.
- Galovski, T. E., Street, A. E., Creech, S., Lehavot, K., Kelly, U. A., & Yano, E. M.** (2022). State of the Knowledge of VA Military Sexual Trauma Research. *Journal of General Internal Medicine*, 37(53), 825–832. <https://doi.org/10.1007/s11606-022-07580-8>
- Glaser, B. G.** (1965). The constant comparative method of qualitative analysis. *Social Problems*, 12(4), 436–445. <https://doi.org/10.2307/798843>
- Hallmann, K., & Giel, T.** (2017). eSports – competitive sports or recreational activity? *Sport Management Review*, 21(1), 14–20. <https://doi.org/10.1016/j.smr.2017.07.011>
- Havlick, D. G., Cervený, L. K., & Derrien, M. M.** (2019). Therapeutic landscapes, outdoor programs for veterans, and public lands. *Social Science & Medicine*, 268, 113540. <https://doi.org/10.1016/j.socscimed.2020.113540>
- Hawkins, B. L., Cory, A. L., & Crowe, B. M.** (2011). Effects of participation in a paralympic military sports camp on injured service members: Implications for therapeutic recreation. *Therapeutic Recreation Journal*, 45(4). <https://js.sagamorepub.com/trj/article/view/2438>
- Hegberg, N. J., Hayes, J. P., & Hayes, S. M.** (2019). Exercise intervention in PTSD: A narrative review and rationale for implementation. *Frontiers in Psychiatry*, 10. <https://doi.org/10.3389/fpsy.2019.00133>
- Hendrick, A., Binks, E., Ferguson, N., & Di Lemma, L.** (2024). Unveiling the influence of competitive sports on the sense of self and identity of disabled Veterans: A Systematic Review and Mixed-Methods Synthesis. *Identity*, 24(3), 194–212. <https://doi.org/10.1080/15283488.2024.2346257>
- Hitch, C., Toner, P., & Armour, C.** (2023). Enablers and Barriers to military veterans seeking help for mental health and alcohol difficulties: A Systematic review of the quantitative evidence. *Journal of Health Services Research & Policy*, 28(3), 197–211. <https://doi.org/10.1177/13558196221149930>
- Hoppen, T. H., & Morina, N.** (2019). The prevalence of PTSD and major depression in the global population of adult war survivors: a meta-analytically informed estimate in absolute numbers. *European Journal of Psychotraumatology*, 10(1), 1–11. <https://doi.org/10.1080/2008198.2019.1578637>
- Hoppen, T. H., Priebe, S., Vetter, I., & Morina, N.** (2021). Global burden of post-traumatic stress disorder and major depression in countries affected by war between 1989 and 2019: a systematic review and meta-analysis. *BMJ Global Health*, 6(7), e006303. <https://doi.org/10.1136/bmjgh-2021-006303>
- Horigian, V. E., Schmidt, R. D., & Feaster, D. J.** (2020). Loneliness, mental health, and substance use among U.S. young adults during COVID-19. *Journal of Psychoactive Drugs*, 53(1), 1–9. <https://doi.org/10.1080/02791072.2020.1836435>
- Hruby, A., Lieberman, H. R., & Smith, T. J.** (2021). Symptoms of depression, anxiety, and post-traumatic stress disorder and their relationship to health-related behaviors in over 12,000 U.S. military personnel: Bi-directional associations. *Journal of Affective Disorders*, 283, 84–93. <https://doi.org/10.1016/j.jad.2021.01.029>
- Inoue, Y., Sato, M., & Filo, K.** (2020). Transformative sport service research: Linking sport services with well-being. *Journal of Sport Management*, 34(4), 285–290. <https://doi.org/10.1123/jsm.2020-0102>

- Invictus Games Foundation.** (2024). Beyond the finish line. In *fim-trust.org*. Forces In Mind Trust. https://s31949.pcdn.co/wp-content/uploads/Beyond-the-Finish-Line_ONLINE-COPY_FINAL.pdf
- Kachadourian, L. K., Tsai, J., Harpaz-Rotem, I., Southwick, S. M., & Pietrzak, R. H.** (2019). Protective correlates of suicidality among veterans with histories of post-traumatic stress disorder and major depressive disorder: Results from the national health and resilience in veterans study. *Journal of Affective Disorders*, 246, 731–737. <https://doi.org/10.1016/j.jad.2018.12.058>
- Kaniasty, K., & Norris, F. H.** (2008). Longitudinal linkages between perceived social support and post-traumatic stress symptoms: Sequential roles of social causation and social selection. *Journal of Traumatic Stress*, 21(3), 274–281. <https://doi.org/10.1002/jts.20334>
- Kazlauskas, E.** (2017). Challenges for providing health care in traumatized populations: Barriers for PTSD treatments and the need for new developments. *Global Health Action*, 10(1), 1322399. <https://doi.org/10.1080/16549716.2017.1322399>
- Kehle-Forbes, S. M., Meis, L. A., Spoont, M., & Polusny, M. A.** (2016). Treatment initiation and dropout from prolonged exposure and cognitive processing therapy in a VA outpatient clinic. *Psychological Trauma: Theory, Research, Practice, and Policy*, 8(1), 107–114. <https://doi.org/10.1037/tra0000065>
- Kelly, M. M., & Vogt, D. S.** (2015). Military stress: Effects of acute, chronic, and traumatic stress on mental and physical health. In M. S. Freeman, B. A. Moore, & A. Freeman (Eds.), *Living and surviving in harm's way: A psychological treatment handbook for pre- and Post-Deployment of military personnel* (201) (1st ed., pp. 85–106). Routledge.
- Kline, A. C., Straus, E., Lyons, R. C., Angkaw, A. C., Davis, B. C., Haller, M., Hien, D., & Norman, S. B.** (2021). Substance use predictors of attendance among veterans in integrated PTSD and alcohol use disorder treatment. *Journal of Substance Abuse Treatment*, 124, 108278. <https://doi.org/10.1016/j.jsat.2021.108278>
- Knappe, F., Colledge, F., & Gerber, M.** (2019). Impact of an 8-Week exercise and sport intervention on Post-traumatic Stress Disorder symptoms, mental health, and physical fitness among male refugees living in a Greek refugee camp. *International Journal of Environmental Research and Public Health*, 16(20), 3904. <https://doi.org/10.3390/ijerph16203904>
- Korte, K. J., Jiang, T., Koenen, K. C., Galea, S., & Gradus, J. L.** (2021). Epidemiology of trauma and PTSD in adults. In M. J. Friedman, P. P. Schnurr, & T. M. Keane (Eds.), *Handbook of PTSD*, (3rd ed, pp. 61–75). The Guilford Press.
- Labov, W., & Waletzky, J.** (1997). Narrative analysis: Oral versions of personal experience1. *Journal of Narrative and Life History*, 7(1–4), 3–38. <https://doi.org/10.1075/jnlh.7.02nar>
- Lawrence, S., De Silva, M., & Henley, R.** (2010). Sports and games for post-traumatic stress disorder (PTSD). *Cochrane Database of Systematic Reviews*, 1. <https://doi.org/10.1002/14651858.cd007171.pub2>
- Levinson, D., & Christensen, K.** (1999). *Encyclopedia of world sport: From ancient times to the present* (First Edition). Oxford University Press.
- Ley, C., Rato Barrio, M., & Koch, A.** (2017). “In the sport I am here”: Therapeutic processes and health effects of sport and exercise on PTSD. *Qualitative Health Research*, 28(3), 491–507. <https://doi.org/10.1177/1049732317744533>
- Li, H., Tofigh, A. M., Amirfakhraei, A., Chen, X., Tajik, M., Xu, D., & Motevalli, S.** (2022). Modulation of astrocyte activity and improvement of oxidative stress through blockage of NO/NMDAR pathway improve post-traumatic stress disorder (PTSD)-like behavior induced by social isolation stress. *Brain and Behavior*, 12(7). <https://doi.org/10.1002/brb3.2620>
- Lincoln, Y. S., & Guba, E. G.** (1985). *Naturalistic inquiry*. Sage Publications. [https://doi.org/10.1016/0147-1767\(85\)90062-8](https://doi.org/10.1016/0147-1767(85)90062-8)
- Malm, C., Jakobsson, J., & Isaksson, A.** (2019). Physical activity and Sports—Real health benefits: A review with insight into the public health of Sweden. *Sports*, 7(5), 127. <https://doi.org/10.3390/sports7050127>
- Manger, T. A., & Motta, R. W.** (2005). The impact of an exercise program on post-traumatic stress disorder, anxiety, and depression. *International Journal of Emergency Mental Health*, 7(1), 49–57.
- May, C.** (2021, July 8). *What is sport?* Sport Australia. <https://www.ausport.gov.au/clearinghouse/evidence/what-is-sport>
- McDonagh, K., Bennett, J. L., & Geden, S.** (2024). Physical activity participation, quality of life, and behavioral health disorders for veterans with PTSD. *Therapeutic Recreation Journal*, 58(1). <https://doi.org/10.18666/trj-2024-v58-i1-12055>
- Meir, D., & Fletcher, T.** (2017). The transformative potential of using participatory community sport initiatives to promote social cohesion in divided community contexts. *International Review for the Sociology of Sport*, 54(2), 218–238. <https://doi.org/10.1177/1012690217715297>
- Michie, S., Richardson, M., Johnston, M., Abraham, C., Francis, J., Hardeman, W., Eccles, M. P., Cane, J., & Wood, C. E.** (2013). The Behavior Change Technique Taxonomy (V1) of 93 hierarchically clustered techniques: Building an international consensus for the reporting of behavior change interventions. *Annals of Behavioral Medicine*, 46(1), 81–95. <https://doi.org/10.1007/s12160-013-9486-6>
- Miles, M., Huberman, M., & Saldana, J.** (2018). *Qualitative data analysis: A methods sourcebook* (4th ed.). SAGE Publications.
- Moore, B., & Penk, W.** (2019). PTSD in the military. In B. Moore & W. Penk (Eds.), *Treatment of PTSD in military personnel*, 2nd ed (pp. 1–6). The Guilford Press.
- Morgan, P. S., Fletcher, D., & Sarkar, M.** (2019). Developing team resilience: A season-long study of psychosocial enablers

- and strategies in a high-level sports team. *Psychology of Sport and Exercise*, 45, 101543. <https://doi.org/10.1016/j.psychsport.2019.101543>
- Moustakas, C.** (1994). *Phenomenological research methods*. SAGE.
- Na, P. J., Schnurr, P. P., & Pietrzak, R. H.** (2022). Mental health of U.S. combat veterans by War Era: Results from the National Health and Resilience in Veterans Study. *Journal of Psychiatric Research*, 158, 36–40. <https://doi.org/10.1016/j.jpsychires.2022.12.019>
- Olvhøj, R., Jensen, T. K., Wienecke, J., & Winther, H.** (2022). Dream team – team sports in a community of adults with intellectual disability. *Sport in Society*, 25(10), 2162–2177. <https://doi.org/10.1080/17430437.2022.2097072>
- Park, C. L., Sacco, S. J., Finkelstein-Fox, L., Sinnott, S. M., Scoglio, A. a. J., Lee, S. Y., Gnall, K. E., Mazure, C., Shirk, S. D., Hoff, R. A., & Kraus, S. W.** (2021). Post-9/11 military veterans' adjustment to civilian life over time following separation from service. *Journal of Clinical Psychology*, 77(9), 2077–2095. <https://doi.org/10.1002/jclp.23144>
- Patterson, E.** (2022, October 18). *Why aren't veterans getting help: How stigma hurts*. Greenhouse Treatment Center. <https://greenhousetreatment.com/veterans-and-addiction/military-culture-stigma/>
- Piggin, J.** (2020). What is physical activity? A holistic definition for teachers, researchers and policy makers. *Frontiers in Sports and Active Living*, 2. <https://doi.org/10.3389/fspor.2020.00072>
- Pluhar, E., McCracken, C., Griffith, K. L., Christino, M. A., Sugimoto, D., & Meehan III, W. P.** (2019). Team sport athletes may be less likely to suffer anxiety or depression than individual sport athletes. *Journal of Sports Science and Medicine*, 18(3), 490–496.
- Rafferty, L. A., Wessely, S., Stevelink, S. A. M., & Greenberg, N.** (2020). The journey to professional mental health support: A qualitative exploration of the barriers and facilitators impacting military veterans' engagement with mental health treatment. *European Journal of Psychotraumatology*, 10(1), 1700613. <https://doi.org/10.1080/20008198.2019.1700613>
- Ramalingam, N. S., Barnes, C., Patzel, M., Kenzie, E. S., Ono, S. S., & Davis, M. M.** (2023). "It's like finding your way through the labyrinth": A qualitative study of veterans' experiences accessing healthcare. *Journal of General Internal Medicine*, 39(4), 596–602. <https://doi.org/10.1007/s11606-023-08442-7>
- Ramos-Sanchez, C. P., Schuch, F. B., Seedat, S., Louw, Q. A., Stubbs, B., Rosenbaum, S., Firth, J., Van Winkel, R., & Vancampfort, D.** (2021). The anxiolytic effects of exercise for people with anxiety and related disorders: An update of the available meta-analytic evidence. *Psychiatry Research*, 302, 114046. <https://doi.org/10.1016/j.psychres.2021.114046>
- Reis, D. J., Gaddy, M. A., & Chen, G. J.** (2022). Exercise to reduce post-traumatic stress disorder symptoms in veterans. *Federal Practitioner*, 39(4), 158–166. <https://doi.org/10.12788/fp.0248>
- Reisman, M.** (2016). PTSD treatment for veterans: What's working, what's new, and what's next. *P & T: A Peer-reviewed Journal for Formulary Management*, 41(10), 623–627. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5047000/>
- Resick, P. A., Wachen, J. S., Dondanville, K. A., Pruiksma, K. E., Yarvis, J. S., Peterson, A. L., Mintz, J., Borah, E. V., Brundige, A., Hembree, E. A., Litz, B. T., Roache, J. D., & Young-McCaughan, S.** (2017). Effect of group vs individual Cognitive Processing therapy in Active-Duty military seeking treatment for post-traumatic stress disorder. *JAMA Psychiatry*, 74(1), 28. <https://doi.org/10.1001/jamapsychiatry.2016.2729>
- Rhodes, R. E., Beauchamp, M. R., Carson, V., Courtnall, S., Wierts, C. M., & Blanchard, C. M.** (2024). Effect of recreational sport and physical activity participation on well-being during early parenthood: a randomized controlled trial. *Annals of Behavioral Medicine*, 59(1). <https://doi.org/10.1093/abm/kaae081>
- Roberts, G. A., Arnold, R., Gillison, F., Colclough, M., & Bilzon, J.** (2020). Military veteran athletes' experiences of competing at the 2016 Invictus games: A qualitative study. *Disability and Rehabilitation*, 43(24), 3552–3561. <https://doi.org/10.1080/09638288.2020.1725655>
- Rosenbaum, S., Vancampfort, D., Steel, Z., Newby, J. M., Ward, P. B., & Stubbs, B.** (2015). Physical activity in the treatment of post-traumatic stress disorder: A systematic review and meta-analysis. *Psychiatry Research-neuroimaging*, 230(2), 130–136. <https://doi.org/10.1016/j.psychres.2015.10.017>
- Saldana, J.** (2021). *The coding manual for qualitative researchers* (Fourth). SAGE Publications.
- Schaeffer, K.** (2023). The changing face of America's veteran population. *Pew Research Center*. <https://www.pewresearch.org/short-reads/2023/11/08/the-changing-face-of-americas-veteran-population/>
- Schnurr, P.** (2023, February 2). *Epidemiology and impact of PTSD*. PTSD: National Center for PTSD. <https://www.ptsd.va.gov/professional/treat/essentials/epidemiology.asp>
- Shah, E., Fransen, K., Slater, M. J., & Barker, J. B.** (2022). The impact of intra-team communication and support relationships on team identification and collective efficacy in elite team sport: A social network analysis. *International Journal of Sport and Exercise Psychology*, 21(4), 1–22. <https://doi.org/10.1080/1612197x.2022.2084761>
- Shah, R.** (2024). Challenges of doing gender research as a male researcher in Pakistan: Reflections from Online and In-Person fieldwork. *International Journal of Qualitative Methods*, 23. <https://doi.org/10.1177/16094069241230021>
- Shaw, S. C.** (2020). Hopelessness, helplessness and resilience: The importance of safeguarding our trainees' mental well-being during the COVID-19 pandemic. *Nurse Education in Practice*, 44, 102780. <https://doi.org/10.1016/j.nepr.2020.102780>

- Silverman, M. N., & Deuster, P. A.** (2014). Biological mechanisms underlying the role of physical fitness in health and resilience. *Interface Focus*, 4(5), 20140040. <https://doi.org/10.1098/rsfs.2014.0040>
- Singh, B., Olds, T., Curtis, R., Dumuid, D., Virgara, R., Watson, A., Szeto, K., O'Connor, E., Ferguson, T., Eglitis, E., Miatke, A., Simpson, C. E., & Maher, C.** (2023). Effectiveness of physical activity interventions for improving depression, anxiety and distress: An overview of systematic reviews. *British Journal of Sports Medicine*, 57, 1203–1209. <https://doi.org/10.1136/bjsports-2022-106195>
- Smith, R. E., & Smoll, F. L.** (2006). Social cognitive approach to coaching behaviors. In S. Jowett & D. Lavalley (Eds.), *Social psychology in sport* (pp. 75–90). Human Kinetics. <https://doi.org/10.5040/9781492595878.ch-006>
- Sommer, J. L., Roy, R., Holens, P. L., & El-Gabalawy, R.** (2020). Post-traumatic stress disorder and chronic pain in the military. *Overlapping Pain and Psychiatric Syndromes*, 189–202. <https://doi.org/10.1093/med/9780190248253.003.0014>
- Spaaij, R., Oxford, S., & Jeanes, R.** (2016). Transforming communities through sport?: Critical pedagogy and sport for development. *Sport, Education and Society*, 21(4), 570–587. <https://doi.org/10.1080/13573322.2015.1082127>
- Stahlman, S., & Oetting, A. A.** (2018). Mental health disorders and mental health problems, active component, U.S. armed forces, 2007–2016. *MSMR*, 25(3), 2–11.
- Statista.** (2025, November 28). U.S. Veterans 2024, by gender. <https://www.statista.com/statistics/250271/us-veterans-by-gender/>
- Steenkamp, M. M., Litz, B. T., Hoge, C. W., & Marmar, C. R.** (2015). Psychotherapy for Military-Related PTSD. *JAMA*, 314(5), 489. <https://doi.org/10.1001/jama.2015.8370>
- Stubbs, B., Vancampfort, D., Rosenbaum, S., Firth, J., Cosco, T., Veronese, N., Salum, G. A., & Schuch, F. B.** (2017). An examination of the anxiolytic effects of exercise for people with anxiety and stress-related disorders: A meta-analysis. *Psychiatry Research*, 249, 102–108. <https://doi.org/10.1016/j.psychres.2016.12.020>
- Teo, A. R., Marsh, H. E., Forsberg, C. W., Nicolaidis, C., Chen, J. S., Newsom, J. T., Saha, S., & Dobscha, S. K.** (2018). Loneliness is closely associated with depression outcomes and suicidal ideation among military veterans in primary care. *Journal of Affective Disorders*, 230, 42–49. <https://doi.org/10.1016/j.jad.2018.01.003>
- Thoits, P. A.** (2010). Stress and health: Major findings and policy implications. *Journal of Health and Social Behavior*, 51(1 suppl), S41–S53. <https://doi.org/10.1177/0022146510383499>
- Townsend, J., Hawkins, B. L., Bennett, J. L., Hoffman, J., Martin, T. P., Sotherden, E., & Bridges, W. C.** (2018). Preliminary long-term health outcomes associated with recreation-based health and wellness programs for injured service members. *Cogent Psychology*, 5(1), 1444330. <https://doi.org/10.1080/23311908.2018.1444330>
- U.S. Census Bureau.** (2021). *Explore census data*. Census.gov. <https://data.census.gov/table?q=B21001&tid=ACSDT1Y2021.B21001>
- U.S. Department of Veteran's Affairs.** (2023, February 3). *How common is PTSD in adults?* https://www.ptsd.va.gov/understand/common/common_adults.asp
- U.S. Department of Veteran Affairs National Center for PTSD.** (2025). *What is PTSD?* U.S. Department of Veteran Affairs. https://www.ptsd.va.gov/understand/what/ptsd_basics.asp
- Vagle, M. D.** (2018). Crafting phenomenological research. In *Routledge eBooks* (2nd ed.). Routledge. <https://doi.org/10.4324/9781315173474>
- Waldhauser, K. J., O'Rourke, J. J., Jackson, B., Dimmock, J. A., & Beauchamp, M. R.** (2021). Purpose after service through sport: A social identity-informed program to support military veteran well-being. *Sport, Exercise, and Performance Psychology*, 10(3), 423–437. <https://doi.org/10.1037/spy0000255>
- Walter, K. H., Otis, N., Hose, M. K., Ober, K. M., & Glassman, L. H.** (2023). The effectiveness of the National Veterans Summer Sports Clinic for veterans with probable post-traumatic stress disorder. *Frontiers in Psychology*, 14. <https://doi.org/10.3389/fpsyg.2023.1207633>
- Ward, J. M.** (2024). *Safe at home: a phenomenological exploration into team sports' perceived influence on PTSD symptoms in military veterans*. ThinkIR: The University of Louisville's Institutional Repository. <https://ir.library.louisville.edu/etd/4426/>
- Wheeler, M., Cooper, N. R., Andrews, L., Hacker Hughes, J., Juanchich, M., Rakow, T., & Orbell, S.** (2020). Outdoor recreational activity experiences improve psychological well-being of military veterans with post-traumatic stress disorder: Positive findings from a pilot study and a randomised controlled trial. *PLOS ONE*, 15(11), e0241763. <https://doi.org/10.1371/journal.pone.0241763>
- Wong, C., & Monaghan, M.** (2020). Behavior change techniques for diabetes technologies. In D. C. Klonoff, D. Kerr, & S. A. Mulvaney (Eds.), *Diabetes digital health* (1st ed., pp. 65–75). Elsevier. <https://doi.org/10.1016/C2018-0-01557-1>
- Wounded Warrior Project.** (2021). *2021 annual warrior survey executive summary*. <https://www.woundedwarriorproject.org/media/ixqbka3q/2021-executive-summary.pdf>
- Yuan, Z., Peng, C., Yang, L., & Chen, H.** (2025). Effects of physical activity on patients with post-traumatic stress Disorder: a systematic review and meta-analysis of randomized controlled trials. *Medicine*, 104(3), e41139. <https://doi.org/10.1097/md.00000000000041139>
- Zhao, F., Liu, C., & Lin, Z.** (2025). A Narrative review of exercise intervention mechanisms for post-traumatic stress Disorder

in Veterans. *Frontiers in Public Health*, 12, 1483077. <https://doi.org/10.3389/fpubh.2024.1483077>

Zuckerman, S. L., Tang, A. R., Richard, K. E., Grisham, C. J., Kuhn, A. W., Bonfield, C. M., & Yengo-Kahn, A. M. (2020). The

behavioral, psychological, and social impacts of team sports: a systematic review and meta-analysis. *Physician and Sports Medicine*, 49(3), 246–261. <https://doi.org/10.1080/00913847.2020.1850152>

TO CITE THIS ARTICLE:

Ward, J. M. (2026). Playing for Freedom: A Phenomenological Exploration Into Team Sports' Perceived Influence on PTSD Symptoms in Military Veterans. *Journal of Veterans Studies*, 12(1), pp. 36–54. DOI: <https://doi.org/10.21061/jvs.v12i1.814>

Submitted: 22 September 2025 **Accepted:** 04 November 2025 **Published:** 13 February 2026

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