



## The Impact of Sport and Physical Activity on the Well-Being of Combat Veterans: A Systematic Review

**PUBLICATION:** *Psychology of Sport and Exercise* (2014); 15(1), 9-18.

**PUBLICATION TYPE:** Peer-Reviewed Journal Article

**KEYWORDS:** Sport, physical activity, combat veterans, well-being, rehabilitation, PTSD

### RESEARCH HIGHLIGHTS:

- This study assesses how sports and physical activity can influence the well-being of veterans outside of a hospital setting. The authors gather information on the effects of sports and physical activity for combat veterans through an empirical assessment of previous studies. They found that participating in sports and physical activity experience enhanced subjective and psychological well-being.
- After participating in sports and physical activity, combat veterans reported a renewed sense of determination and inner strength, increased quality of life, and cultivation of a positive self-identity. Participating in sports and physical activity might assist combat veterans with re-focusing on achieving their goals, broadening their horizons, cultivating positive self-identity and feeling a sense of achievement from their accomplishments.
- The authors found that nature-based therapies have a therapeutic impact on the well-being of combat veterans. Nature-based treatments provided a time-out from every day stressors, reduction in PTSD symptoms and a renewed sense of spiritual awareness for some veterans. Combat veterans tended to prefer treatments and immersion within natural environments over treatment in a clinical or medical setting. Further research is needed to understand the mechanisms behind the benefits of nature-based activity and to specific the vague allusions to 'nature's healing power' referred to in some studies.

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### ABSTRACT:

*Objectives:* This review examined the potential impact of sport and physical activity upon the subjective and psychological well-being of combat veterans in the aftermath of physical or psychological combat trauma.

*Design:* A systematic review was conducted. The question guiding this review was 'what is the impact of sport and physical activity on the well-being of combat veterans?'

*Methods:* Key databases were searched for articles relating to the use of sport and/or physical activity in supporting combat veterans. 11 studies were identified as relevant for inclusion. Data from these studies were extracted by means of a directed content analysis, the results of which were reported in a narrative synthesis.

*Results:* Sport and physical activity enhances subjective well-being in veterans through active coping and doing things again, PTSD symptom reduction, positive affective experience, activity in nature/ecotherapy, and quality of life. Impact on psychological well-being includes determination and inner strength, focus on ability and broadening of horizons, identity and self-concept, activity in nature/ecotherapy, sense of achievement/accomplishment, and social well-being. Participating in sport and/or physical activity can also enhance motivation for living.

*Conclusions:* The review advances knowledge by producing a synthesis of evidence that highlights the value of sport and physical activity for supporting the well-being and rehabilitation of disabled combat veterans and combat veterans diagnosed with Post-Traumatic Stress Disorder. It also develops knowledge by identifying the type of sports and physical activities used to promote well-being, offering the first definition of combat veterans in the sport literature, taking a critical approach, and highlighting the under researched role of nature-based physical activity."

## Implications

### FOR PRACTICE

Participation in physical activity and sports is associated with better stress management and psychological understanding of one's own disability. Physical activity and sports might assist combat veterans with returning to activity that was typical prior to being disabled. Veterans with physical disabilities or injuries may consider sports and other competitive activities as a complement to recovery and management of their conditions. Some previous studies reported that outdoor physical activities might help reduce PTSD symptoms. Veterans with PTSD may also consider engaging in physical activities as part of a treatment plan. Health care providers and therapists should plan balanced comprehensive treatment models that encompass medical and/or psychological treatment, physical activity and sports as appropriate. Family members and friends of combat veterans with mental and physical disabilities should encourage their veteran to participate in programming aimed at increasing one's ability to cope with the psychological effects of a combat-related disability. Support networks should encourage combat veterans with physical disabilities to participate in competitive sports and other recreational activities. Similarly, support networks should encourage combat veterans with mental disabilities to participate in therapeutic physical activities.

### FOR POLICY

The Department of Defense offers extensive clinical and medical treatment for veterans. The DoD might implement minor adjustments to programming to expand therapy options to include treatment opportunities outside of hospital settings to better address the unique needs of all service members. Research reviewed in this study exemplifies the psycho-social benefits potentially available to injured veterans and veterans experiencing PTSD through participation in sport and physical activity. Given the benefits associated with competitive and elite sports, the DoD might further promote and expand The Grant Program and the US Paralympic Military Sports Camp to provide sports opportunities to more disabled combat veterans. The VA might utilize these findings to plan sport programming and holistic therapies that address the needs of specific sub-groups of veterans. The VA might re-evaluate its programs to ensure a reduction of barriers. Barriers might include financial cost, geographic distance from treatment, accessibility, social stigma associated with a wounded or disabled status, and lack of knowledge regarding the recreational opportunities available to them. Policy makers might work with the VA and communities to create local partnerships that integrate veterans into already existing sports and physical activity programming. Policy makers might also allocate additional funding to community initiatives that incorporate veterans' participation to allow veterans greater access to local programming.

### FOR FUTURE RESEARCH

Caddick and Smith found inconsistent classifications of combat veterans across studies. Future research should standardize the definition of combat veteran. Subsequent research is needed to determine how nature based programs contribute to the well-being of combat veterans. Future researchers should explore how nature-based therapy affects combat veterans' overall treatment outcomes. Future research should also examine how program planning and management can provide benefits for long-term recovery and rehabilitation of disabled, injured and PTSD veterans. Future studies are needed on the impact of sports and physical activity on well-being of female combat veterans. Future research should specify the type of sport or physical activity completed when assessing the therapeutic impact of these activities. Building on the studies reviewed by Caddick and Smith, future researchers should utilize not only experimental designs but also qualitative work including longitudinal interviews and timelines to offer insight on long term effects of sports and physical activities as therapy for combat veterans.

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