

# CLEARINGHOUSE FOR MILITARY FAMILY READINESS

## **Examining the Relationship of Mental Well-being and Recreational Sports in Adolescents and Adults: Rapid Literature Review**

Clearinghouse Technical Assistance Team

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**PennState**

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## Executive Summary

This report was developed in response to a request for information on the impact participation in recreational sports has on the mental well-being of adolescents and adults. The Technical Assistance team at the Clearinghouse for Military Family Readiness at Penn State conducted a rapid review of relevant research literature between 2013 and 2023 on the topics of interest.

Engaging in recreational sports may be a fun way for participants to feel good about themselves and to get physical exercise. These types of activities have also demonstrated their value as increasing protective factors, such as enhanced social connections, personal resilience, and social/emotional competency, and developing catalysts for higher levels of well-being. For example, participation in recreational sports has been associated with reductions in stress levels, fewer episodes of suicide ideation, and protection against many other mental health challenges (Andersen et al., 2019; Eime et al., 2013; Forrester, 2015; Pluhar, 2019).

The research on this topic has not measured long-term impact or determined common conceptual models and terminology. While the literature clearly establishes that participation in recreational sports is reported to increase well-being at the time of participation, little longitudinal evidence to inform on the long-term impact of participation could be located. In addition to a deficiency of longitudinal studies that measure impact, the domain does not have consensus on models of recreational sports participation. Components such as definitions and theory lack operationalization across the topic area. This lack of consistency in discussions can inhibit comparisons between research results.

This rapid review provides the following:

- Background on the definition of recreational sports and well-being outcomes.
- Discussion of the positive impacts of recreational sports participation.
- Knowledge gaps in the research literature on the topics of interest.

Note, this rapid review provides a preliminary examination of the research and is not intended to serve as a comprehensive review of the literature. It is intended to help stakeholders make data-driven decisions about next steps.

## Introduction

To better understand the relationship between recreational sports and adolescent and adult mental well-being, the Technical Assistance (TA) team at the Clearinghouse for Military Family Readiness at Penn State (Clearinghouse) conducted a brief, rapid literature review. Research that examines this topic was identified by searching peer-reviewed journal articles and grey literature, and an emphasis was placed on research

published between 2013 and 2023. Search queries included various combinations of the following terms: recreational, mental health, well-being, sport participation.

The research surrounding this topic area appears to be hindered by a lack of consensus in operationalized components such as definitions and theory of the research. For example, published research offers a variety of different definitions, and conceptual understandings of definitions, of commonly used terms (e.g., “team sports” and “recreational sport”) and the theories that use those terms (Andersen et al., 2019; Biddle et al., 2019).

## **Defining Recreational Sports**

Organized sports participation can be divided into two categories: recreational and elite/professional. Although this report only focuses on recreational sports participation, it may be helpful to understand the difference between the two types of participation. Recreational sports can be defined as sports programs that highlight a person’s participation over their level of performance (Vella et al., 2022). Definitions of elite and professional sports vary throughout the literature; however, this level of engagement generally emphasizes performance over participation (Swann et al., 2015). Vella and colleagues (2022) propose that any organized sport that is not elite and/or professional is, then, recreational sport. Understanding the difference between recreational and professional/elite sports is important in appreciating how both levels of sport (i.e., recreational and professional/elite) have unique protective and risk factors for their participants. Because published research on the impacts of recreational sports offers little in the way of an agreed upon definition of “recreational sports” this review will consider any organized sport that is not elite or pro to be recreational.

## **Positive Outcomes**

It has been well documented that participation in recreational sports can provide an array of positive health benefits, physical and mental, that result from the physical activity involved (Eime et al., 2013; ). Eime and colleagues (2013) review of the literature found that physical activity can alleviate symptoms of depression and anxiety. The same literature review found that adolescents who participated in team sports were less likely to report risk-taking behavior and mental health challenges than their peers who did not participate in team sports (Eime et al., 2013). Unfortunately, there are no studies to compare the positive outcomes of adults and adolescents.

Participation in sports can serve as a form of entertainment, but it can also have an impact on an individual’s well-being. Involvement in recreational sports has been shown to improve self-report conditions across several domains such as social capital (e.g., increased social network), cognition, mental health, and physical well-being (Lower et

al., 2013; Stenseng et al., 2015). One of the most basic positive impacts individuals may receive from sports participation is experiencing positive emotions such as happiness, contentment, and satisfaction (Stenseng et al., 2015). However, recreational sports participation has been shown to impact individuals in more complex outcomes such as protecting against suicide ideation (Eime et al., 2013; Pluhar, 2019).

There are several instances in which recreational sports participation has increased general feelings of well-being. For example, Forrester (2015) found that there was a positive relationship between college students increasing their engagement and participation in recreational sports and their feelings of well-being. Eime and colleagues' (2013) literature review found that, in terms of self-esteem gained from team sports, females were more likely to notice increased self-esteem at an earlier age than males.

The following are examples of positive impacts that participation in recreational sports can have on participants:

- Reduced stress and anxiety (Andersen et al., 2019; Forrester, 2015)
- Reduced risk-taking behavior (Eime et al., 2013)
- Reduced feelings of isolation and loneliness (Andersen et al., 2019)
- Increased healthy behaviors such as physical activity and socialization (Andersen et al., 2019)
- Increased self-confidence/self-esteem/self-acceptance (Andersen et al., 2019; Pluhar, 2019; Rodríguez-Bravo, 2020)
- Fewer mental health challenges (Andersen et al., 2019; Eime et al., 2013)
- Reduced body dissatisfaction (Eime et al., 2013)
- Protection against feelings of hopelessness (Andersen et al., 2019; Eime et al., 2013)
- Protection against suicide ideation (Eime et al., 2013; Pluhar, 2019)
- Increased emotional self-efficacy (Andersen et al., 2019; Eime et al., 2013; Magee et al., 2015; )
- Improved cognitive function (Biddle et al., 2019; Eime et al., 2013)

Some evidence suggests that those who participate in team sports may experience slightly more well-being results compared to those who participate in solo sports. A review of the literature found that individuals who participate in team sports show slightly more social and mental health improvements than their peers who participate in individual sports (Andersen et al., 2019). Similarly, Pluhar and colleagues (2019) found that adolescent team-sports participants were less likely to report anxiety or depression than those in individual sports. This outcome does not indicate that participation in solo sports creates a risk factor; this outcome does indicate that there is a greater amount of reported well-being for those who participated in team sports and a higher frequency of mental health challenges for those who participated in solo sports. However, participation in both team and solo sports has been shown to provide positive benefits (Pluhar et al., 2019).

As stated above, research has shown that participating in recreational sports can offer protection against the onset of mental health challenges, but involvement in recreational sports can also be beneficial to those who are already suffering from mental health challenges. For these individuals, their participation in recreational sports can alleviate some of the challenges they encounter daily. For example, participation in recreational sports can provide structure in individuals' daily lives as they plan activities. Creating a daily structure can help an individual form a routine, and having a routine can reduce one's stress, which can result in improved mental health (Andersen et al., 2019). Other research reviewed by Andersen and colleagues (2019), suggests that involvement in recreational sports can have a positive mental health impact on those who are unemployed. The unemployed participants noted that involvement in recreational sports gave them increased self-esteem and social interaction that was either not present or at reduced amounts due to their unemployment.

There is research to suggest that many of the positive benefits of participation in recreational sports exists only in the window of time in which the participant is immersed in the activity. When individuals discontinue playing team sports, they may lose social interaction and components that have served as mental health protective factors (Eime et al., 2013; Reardon, 2021). In other words, when one separates from his or her team, he or she no longer has access to the frequent support of pro-social connections, such as coaches and teammates, that were available while he or she was on the team. Keeping individuals engaged and connected to these activities as a participant, coach, or in another capacity may help to keep these social bonds present for the individuals. Another positive is that campaigns that intend to keep individuals engaged in recreational sports may help to increase protective factors in the community.

## **Knowledge Gaps in the Research Literature**

Andersen and colleagues (2019) emphasize that inconsistencies in defining "recreational sports" raise alarms about the validity of the research in the field. For instance, researchers may find it challenging to compare two studies of recreational sports when the authors may have used two different understandings of what specifically constitutes "recreational sports." A better understanding of the impact of recreational sports on an individual's well-being may come from more rigorous research design in the field. The topic of recreational sports participation lacks a meaningful number of longitudinal studies that investigate the long-term impact of these programs on an individual's mental health (Andersen, et al., 2019).

During this review, researchers found very little research that investigated how or if recreational sports impact different demographics (e.g., gender, ethnicity) differently. Pluhar and colleagues (2019) caution that their research does not control for the differences in male and female biology, and there may be more information to investigate in this area.

## Summary

Participating in recreational sports has been shown to contribute to an individual's overall well-being (Rodríguez-Bravo et al., 2020). The research has shown that participating in these activities provides several protective factors, such as a reduction in symptoms of depression and produces reductions in negative mental health symptoms. There is evidence that continued participation in sports can serve as maintenance for the positive impacts that participants experience. Community leaders who support individuals' engagement in these activities are strengthening the local population. Programs that encourage continued participation should be considered for

research on the topic. Understanding the impact of long-term engagement in

could be beneficial.

## Additional Assistance

The TA specialists at the Clearinghouse provide support to professionals as they examine and make informed decisions about which programs fit specific situations and are worth the investment. Whether connecting one with the resources and tools to conduct a needs assessment in a specific community, suggesting the best evidence-based program or practice for a certain situation, or developing an evaluation plan, the TA team of experts is a call or email away.

Please visit the Clearinghouse's website at [www.militaryfamilies.psu.edu](http://www.militaryfamilies.psu.edu), or call 1-877-382-9185 to speak with a TA specialist.

## Suggested Citation

Clearinghouse for Military Family Readiness at Penn State. (2023, January). *Examining the relationship of mental well-being and recreational sports in adolescents and adults* [Literature Review]. Clearinghouse for Military Family Readiness at Penn State.

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