

Sand sports and mental health: a theoretical proposal

Abstract

The aim of this study was to propose a theoretical approach aimed at better understanding the relationship between sand sports and mental health, mainly through aspects of socialization. To this end, a narrative review was carried out in the PubMed, Scielo and Web of Science databases and in books related to the topic, thus presenting a theoretical proposal. The results show that just as physical activity provides benefits for mental health in terms of neurobiological, psychophysiological and social aspects, sand sports, as a sport, can also improve clinical conditions for mental disorders. In particular, this study hypothesizes that, possibly, the social aspects present in sand sports could be the greatest ally of positive responses in terms of mental health. However, this hypothesis needs further support from empirical studies. It is therefore suggested that future studies investigate this phenomenon cross-sectionally and longitudinally in order to gain a better understanding.

Keywords: sand sports, mental health, social support

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Introduction

Currently, epidemiological indices on the prevalence of mental disorders around the world are alarming. According to recent data, 10.7% of the global population suffers from symptoms of depression and anxiety.^{1,2} However, there are behavioral strategies aimed at healthy lifestyle habits that can prevent and help treat the symptoms of mental disorders. The literature has particularly suggested that habits such as healthy eating, restorative sleep, stress management, social support and physical activity seem to have a direct impact on improving mental health.³⁻⁶ In this sense, the practice of physical activity has been widely studied in relation to its mental health benefits. The mental health benefits provided by physical activity go hand in hand with three main pathways: psychophysiological, neurobiological and social.⁷⁻¹⁰

Among the types of PA, those carried out on sandy terrain, such as beach volleyball, beach soccer, beach tennis and footvolley, for example, can help in the process of preventing and treating mental health symptoms. In addition to the neurobiological and psychophysiological aspects inherent in performing physical activity, sand sports seem to have a strong link with socialization, a specific area for mental health through physical activity. In view of this, the aim of this study is to propose a theoretical approach aimed at better understanding the relationship between sand sports and mental health, mainly through aspects of socialization. To this end, a narrative bibliographical study was carried out in the PubMed, Scielo and Web of Science databases and in books related to the topic.

Sand sports and mental health

Sports practiced on sand have grown substantially around the world. In tropical countries such as Brazil, for example, data shows that demand for sand sports has grown by around 120% in recent years. The main sports practiced on the sand are beach tennis, beach volleyball, beach soccer and footvolley. Performing physical exercises on the sand has physical benefits, as demonstrated by Balasas et al.¹¹ In this study, indoor volleyball athletes trained on the sand and obtained better results in relation to strength valences, especially strength of the

knee extensors and plantar flexors, as well as an increase in vertical jump height.

Furthermore, the practice of sand sports, due to the instability provided by the terrain, can provide an increase in balance and proprioception capabilities. Furthermore, improvements can occur in aspects of agility in changing direction, in propulsion, in explosive strength and in cardiovascular capacities.¹² Furthermore, the practice of physical activity appears to be related to mental health through neurobiological, psychophysiological and social pathways.¹³ The psychophysiological aspects refer to the improvement in the autonomic nervous system, especially in the optimized return to homeostasis after situations of psychological stress,¹⁴ which reduces the harmful effects of substances such as cortisol, for example (a substance increased in basal levels in individuals with mental disorders).⁸

In terms of neurobiology, the practice of physical activity, especially when performed at high intensity, appears to promote the release of substances such as Brain-Derived Neurotrophic Factor (BDNF) and Irisin, which aid in neural remodulation such as neuroplasticity, which is essential in psychotherapeutic treatments for people with mental disorders.^{7,9} Finally, social aspects tend to greatly assist in the prevention and treatment of mental disorders because social support is a basic psychological need for well-being, and the notion of belonging can strengthen other domains of the theory of basic psychological needs, such as the perception of competence, since receiving positive feedback from peers seems to not only increase the perception and actual competence of a skill, but also increases intrinsic motivation,^{15,16,13} which tends to provide mental health benefits.¹⁷

Furthermore, studies have investigated sandplay therapy for reducing mental health symptoms, especially depression, anxiety, and stress.^{18,19} Tan et al.,¹⁹ for example, show that children who perform activities in a simulated sand environment tend to reduce levels of anxiety and behavioral problems. In adults, sandplay therapy also appears to work, considerably reducing symptoms of anxiety.¹⁸ In this theoretical proposal, the objective is to draw attention to the possible social aspects of beach sports and how they can positively

impact mental health, considering that social support seems to provide higher rates of intrinsic motivation. Social support, that is, healthy social relationships, is one of the basic psychological needs for well-being and, above all, for the self-determined motivation of a behavior, promoting adherence to it, making it a habit.²⁰

But how do these sports promote social support?

It is not very difficult to scroll through social media pages like Instagram, for example, and see photos or videos of people practicing these sports. And, those who have already tried these sports know that the “atmosphere” is a bit “beachy”, often with music playing in the background (the students’ preferred music), and the famous “resenha” (slang originated in Brazil that refers to small talk that is carried over from more traditional sports like soccer). These situations promote the formation of affection between the participants, motivating the students to continue practicing not only for the physical practice of the sport, but also because of the positive social bonds that are formed in these environments. Therefore, the practice of sand sports seems to promote adherence to a healthier lifestyle due to the positive social relationships that are eminent in the practice, because as we are social beings, having a “tribe” seems fundamental for adherence. Consequently, it is suggested that aspects such as motivation, social support and mental health domains be better investigated in sand sports practitioners around the world as a way of better understanding the hypothesis suggested in this article Figure 1.



Figure 1 Hypothetical model of how sand sports improve mental health through social support.

Conclusion

Considering the previous studies on the benefits of physical exercise for social support and how it seems to improve mental health symptoms, especially depression and anxiety, as well as the empirical observation of the probable high sense of social belonging that sand sports provide to practitioners, it can be hypothesized that practicing sports in the sand, due to the social support existing in these modalities, could promote improvements in the mental health of practitioners. Finally, based on the above, this study seeks not only to expand knowledge on the subject slightly, but also to motivate researchers to carry out empirical studies on the subject in order to test the proposed hypothesis with more robust data from practitioners of sports practiced on sand.

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Conflicts of interest

The author declares there is no conflict of interest.

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