

# Importance of Sports Activity for the Better Mental Health of the Indian Student

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## Abstract

Physical activity, beyond its well-documented benefits for physical health, plays a crucial role in enhancing mental well-being. Research suggests that individuals with sedentary lifestyles exhibit higher morbidity rates and increased healthcare expenditures. In response to these challenges, exercise therapy is often recommended as an effective intervention for maintaining mental health. Empirical studies have consistently established a positive connotation between physical activity and various mental health outcomes. Notably, nonclinical investigations highlight that regular exercise significantly enhances self-concept and body image. This review aims to summarize current physiological and psychological mechanisms by which exercise contributes to mental well-being. One of the primary physiological pathways involved is the regulation of the hypothalamus-pituitary-adrenal (HPA) axis, which plays a serious role in stress reply. While exercise has been shown to alleviate indications of depression and anxiety, its effects appear to be more pronounced in clinical populations than in the general public. Multiple theoretical models have been projected to explicate the relationship between physical fitness and mental health.

**Keywords:** Sports, Exercise, Mental Health, Literature, Empirical Research.

## Introduction

The relationship between sports and mental health has been recognized since ancient times, with sports traditionally serving as a means to maintain both physical and psychological well-being. In recent years, numerous studies have provided empirical evidence supporting the positive effects of sports on mental health. Understanding this relationship is crucial to designing interventions that utilize sports as a tool for mental health improvement. A thorough analysis of existing literature can help evaluate the current body of knowledge and identify gaps for future research.

Research suggests that participation in sports can aid in alleviating mental health issues, including depression, anxiety, and stress. In addition, sports activities have been shown to improve mood and improve an individual's overall quality of life. Experimental studies in the field often involve the direct measurement and observation of these psychological effects, providing a solid foundation for empirical inquiry. Several studies highlight that participation in sports leads to a reduction in stress levels, improved mood, and better quality of life, reinforcing the significance of physical activity in mental fitness promotion.

Achieving a nuanced understanding of key concepts, such as mental health and sports, requires comprehensive literature analysis. This process also involves engaging with experts in the field to refine definitions and explore emerging perspectives. By systematically reviewing the existing evidence and methodologies, this thesis aims to explore the psychological benefits of sports participation and identify practical strategies for integrating sports into mental health frameworks. This approach will further contribute to developing informed interventions tailored to diverse populations, supporting mental well-being through sports participation

“Based on current knowledge, the relationship between exercise and mental health has been widely studied and researched” [1], “showing that exercise can help resolve mental health problems such as depression, anxiety, and stress. Exercise can improve brain function and strengthen the immune system, which in turn can help prevent mental health problems” [2]. “Exercise can improve the quality of life and increase mental well-being” [3].

“Globally, it is estimated that 27.5% of adults do not meet the WHO physical activity (PA) guidelines” [4][5]. Individuals from socioeconomically disadvantaged communities are generally less physically active, which, coupled with the high prevalence of mental health challenges in these populations, highlights the importance of promoting physical activity (PA). Even a modest improvement in PA levels could significantly reduce symptoms of depression and anxiety, offering meaningful health benefits. Interventions aimed at increasing PA in these communities have the potential not only to improve mental well-being but also to enhance health equity.

### **Literature Review**

The theoretical review highlights the significant and positive impact of exercise on mental health, contributing to improved superiority of life. Mental health theory defines mental well-being as a state in which individuals exhibit optimal emotional, social, and intellectual functioning. It emphasizes the interconnectedness of physiological, psychological, and environmental factors in maintaining mental health. Exercise theory posits that structured and consistent physical activity can enhance mental health outcomes by promoting emotional stability, cognitive functioning, and social well-being. Together, these theories provide a comprehensive framework for understanding the beneficial relationship between physical exercise and mental health.

Schlesinger et al. conducted a study entitled “Clinical Update: Collaborative Mental Health Care for Children and Adolescents in Pediatric Primary Care” [6]. “Regular exercise can help reduce the symptoms of depression, anxiety, and stress in adults. Lacey et al. in a systematic review of the mental and physical health of young carers” [7].

“Physical activity may provide benefits for mental health and wellbeing via multiple overlapping neurobiological, psychosocial, and behavioral mechanisms” [8]. These changes may include the regulation of cortisol levels, which helps manage stress, and improvements in brain-wide vasculature, endorsing better blood flow and oxygen transfer to the brain. Such neurobiological adaptations contribute to enhanced cognitive function, emotional regulation, and overall mental well-being. “Physical activities, particularly sports, have been widely recognized for their mental health benefits. Regular participation in sports is associated with reduced symptoms of anxiety and depression, improved mood, and better emotional resilience. Engaging in team sports fosters a sense of belonging, enhances self-esteem, and promotes positive peer interactions, which are crucial for adolescents” [9].

### **Discussion**

- **Sports as a Coping Mechanism for Stress and Anxiety**

In the context of Indian students, sports offer a constructive outlet to cope with academic stress and anxiety. Participating in physical activities excites the release of endorphins, the body’s natural mood garnishes, which can help decrease stress. Additionally, sports instill discipline, patience, and resilience, which are crucial in managing emotional challenges.

- **Building Social Skills and Self-Esteem through Sports**

Sports activities, especially team-based ones, enhance interpersonal skills by promoting teamwork, communication, and leadership abilities. Indian students, who often face social pressure, benefit from such positive social interactions. Sports also boost self-confidence and provide a sense of accomplishment, helping students develop a positive self-image.

- **Barriers to Sports Participation in India**

Despite the recognized benefits, several barriers limit students' participation in sports. The Indian education system often prioritizes academics over extracurricular activities, leaving limited time and resources for sports. Additionally, societal expectations, especially in urban areas, discourage students from investing time in physical activities, with parents viewing it as a distraction from studies. The lack of adequate infrastructure, trained coaches, and gender stereotypes further restrict sports participation, especially for female students.

- **The Role of Physical Activity in Managing Depression and Anxiety Disorders**

Depression is the important cause of incapacity worldwide and a significant contributor to the global burden of disease, according to the World Health Organization. Despite its prevalence, only 10% to 25% of individuals experiencing depression seek treatment. Barriers to seeking help may include financial constraints, a shortage of trained mental health professionals, and the persistent shame surrounding mental illness. For individuals with mild to reasonable mental health conditions, such as depression and anxiety, engaging in regular physical activity has shown to be an effective intervention, offering both psychological and physical benefits.

Exercise can play a vital role in the treatment and administration of depression. Research suggests that systematic physical activity may alleviate depressive symptoms as effectively as, if not more than, old-fashioned antidepressants. However, the relationship between exercise and a reduced risk of depression has not yet been thoroughly explored. One potential mechanism involves the release of endorphins opioid polypeptides. The opioid system, regulated by these endorphins, is thought to influence analgesia, social bonding, and mood. This connection between  $\beta$ -endorphins and depressive symptoms suggests that physical activity may act as a natural mediator in managing depression.

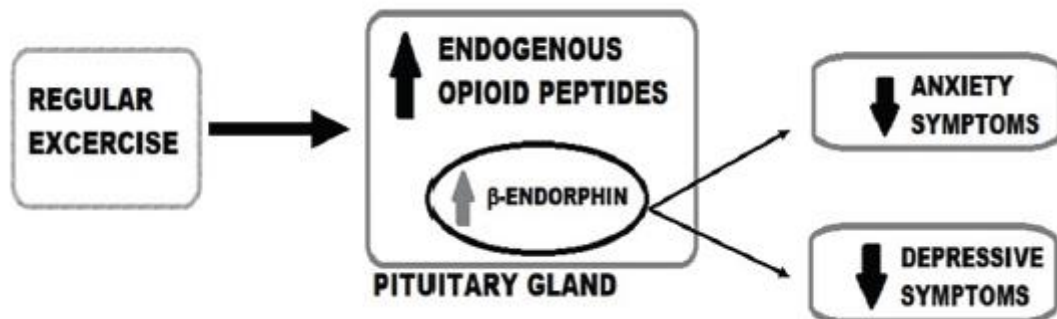


Fig. 1: Effects of Regular Exercise

### Recommendations

- **Incorporating Sports into School Curricula**

Educational institutions must integrate sports into the academic curriculum to ensure students have regular access to physical activities. Schools should allocate dedicated time for sports and physical education classes without compromising academic schedules.

- **Awareness Campaigns and Mental Health Programs**

There is a need to raise awareness among parents, teachers, and students about the mental health benefits of sports. Schools can organize workshops and mental health programs that promote sports as a vital component of well-being.

- **Building Infrastructure and Addressing Gender Bias**

Investment in sports infrastructure is essential to encourage participation. Schools and colleges should also address gender stereotypes that discourage female students from participating in sports by creating inclusive environments and offering equal opportunities for all genders.

- **Collaboration with Mental Health Professionals**

Educational institutions can collaborate with mental health professionals to design programs that integrate sports into broader mental health interventions. Structured exercise therapies and recreational sports activities should be offered as part of student support services.

## Conclusion

The beneficial effects of exercise on mental health are well-documented across various populations. Among individuals diagnosed with schizophrenia, yoga has demonstrated more significant improvements in mental well-being compared to no intervention, highlighting the therapeutic potential of exercise. Additionally, consistent physical activity plays a vital role in enhancing sleep quality, which is crucial for overall mental health. In patients with alcohol dependence syndrome, the combination of medical therapy and regular exercise has shown positive outcomes by reducing cravings and motivating individuals in their recovery journey.

There is substantial evidence associate the effectiveness of physical exercise in assuaging symptoms of depression and anxiety. Integrating these findings into clinical practice is essential to optimize mental health outcomes. Developing structured exercise-based therapies and training professionals to deliver them effectively are critical next steps. However, there is a noticeable gap in the literature addressing the role of exercise interventions within the Indian context. Further research is needed to design and implement culturally tailored physical activity programs, ensuring they are relevant and effective in meeting the mental health needs of Indian populations.

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