

REVIEW

# *Role of regular physical activity in enhancing self-awareness and self-confidence among undergraduate students*

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## ABSTRACT

**Background:** This review article aims to emphasize the role of regular physical activity in enhancing self-awareness and self-confidence among undergraduate students.

**Methods:** In the search for scientific literature for this review, data from the US National Library of Medicine (PubMed), MEDLINE, PsycINFO, and SportDiscus were used, and the terms “physical activity”, “psychological health”, “self-awareness”, and “self-confidence” were used. The relevant literature has also taken its source from the research of relevant articles from reference lists derived from data searches.

**Results:** It is noted that there is a growing body of evidence to suggest that regular exercise may have a positive effect on psychological and general health. This is particularly the case among undergraduate students, where regular physical activity has been shown to have a beneficial impact on mood, cognitive functions, anxiety, depression, self-awareness, and self-confidence.

**Conclusion:** It appears that physical activity may also play a role in improving not only on improving metabolic health or achieving ideal weight but also psychological health, as well. Research studies have shown that regular physical activity can benefit individuals, especially students, in a variety of ways, including contributing to positive physiological and psychological effects. At the same time, it was emphasized in the research results that it has an effect that improves students' psychological health and self-awareness, as well as self-confidence.

**Keywords:** physical activity, psychological health, self-awareness, self-confidence

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## INTRODUCTION

Physical activity has a very important impact not only on improving metabolic health or regular exercise habits aimed at achieving an ideal weight but also on psychological health. Scientific research has shown that regular exercise improves psychological health,

reduces stress, and improves overall mental health. As a result of this extensive research, it has been discovered which hormonal systems and physiological mechanisms regular physical activity activates to improve mood and play a pivotal role in enhancing both metabolic and psychological well-being [1].

Scientific studies have consistently demonstrated the positive impact of regular exercise on psychological health, stress reduction, and overall mental well-being [2-4].

Regular physical activity has been proven to have numerous benefits for individuals of all ages and backgrounds, including undergraduate students. Engaging in physical activities not only improves physical health but also has a positive impact on mental and emotional well-being. In particular, regular physical activity enhances self-awareness and self-confidence among undergraduate students, which are crucial aspects of personal growth and development during this stage of life. Engaging in physical activities yields multifaceted advantages for individuals across diverse age groups and backgrounds, including undergraduate students [5,6]. Beyond the evident physical health improvements, regular physical activity significantly influences mental and emotional well-being [7]. Specifically, it fosters self-awareness and self-confidence among undergraduate students, integral components of personal growth and development during this life stage [8,9].

Due to today's fast pace of life and demanding working life, stress has become an inevitable part of life. Whether it is caused by economic problems, difficulties arising from working life, or personal problems, stress significantly affects mental health and causes psychological problems at various levels. Whether arising from economic challenges, workplace issues, or personal problems, stress has substantial implications for mental health and can lead to various psychological problems [10]. Amidst these challenges, adopting the habit of regular physical activity

emerges as an effective strategy to combat chronic stress, providing positive contributions to psychological health [11]. Although the stress experienced in today's world significantly affects mental health, there are many ways to combat this chronic problem, and one of these solutions is to gain the habit of regular physical activity. The habit of regular physical activity not only helps to reduce stress but can also make positive contributions to psychological health [12].

Physical activity has been shown to improve cognitive function in individuals with mental health problems, as regular exercise increases blood flow to the brain, which stimulates the growth of new neurons and can improve cognitive abilities such as memory, attention, and problem-solving skills. This may be particularly beneficial for people with depression, as in recent years, depression and anxiety problems have become more common all over the world [13]. Recent clinical research in this field focuses on the role of regular exercise habits in reducing stress caused by the daily pace of life and improving mental health by affecting the brain, hormones, and emotions. These benefits are attributed to the activation of specific hormonal systems and physiological mechanisms through regular physical activity, which contribute to mood improvement [14].

One of the most positive contributions of physical activity for individuals experiencing intense stress and widespread anxiety, which can impair psychological health, is that regular exercise causes an increase in the secretion of endorphins. Endorphins are known as neurotransmitters (chemical transmitters) responsible for the production of happiness and optimistic

emotions, and regular exercise habit stimulates the release of these chemicals in the brain, which can help reduce symptoms of depression and anxiety, which are common in individuals with psychological problems [15]. Physical activity increases the production of endorphins, neurotransmitters, and hormones that are beneficial in combating these mental health disorders, allowing the individual to move away from negative thoughts and encouraging a sense of achievement, increasing self-esteem and confidence. Recent clinical research has focused on the role of consistent exercise habits in reducing stress caused by the daily pace of life and improving mental health by influencing the brain, hormones, and emotions [16,17]. In the contemporary fast-paced and demanding lifestyle, stress has become an inevitable part of life, significantly affecting mental health [18].

## **DISCUSSION**

Numerous studies have highlighted the positive impact of regular physical activity on students' self-confidence, fostering greater self-esteem, self-efficacy, and overall well-being. Integrating physical activity into educational settings holds significant promise for enhancing students' psychological development and academic success. Therefore, developing tailored interventions to maximize the benefits of physical activity for diverse student populations is crucial.

Evidence from prior studies demonstrates the physical and psychological benefits of exercise and physical activity. For instance, a study by İlhan & Bardakçı (2020) [19] revealed significantly higher self-confidence among students regularly

participating in physical activity compared to non-participants. Similarly, research conducted by Zhang et al. (2024) demonstrated a positive and significant relationship between physical activity, self-efficacy, stress management, and mental health [20]. Physical intervention can boost students' self-confidence and foster resilient psychological traits, ultimately enhancing life satisfaction. Therefore, society, schools, and families should prioritize physical exercise to support students' emotional and behavioral well-being. Li, H.-Y., et al. (2022) emphasized that physical exercise plays a crucial role in promoting life satisfaction, self-confidence, and resilience among students [21].

Likewise, self-awareness and physical activity have been receiving attention. Self-awareness is a personal ethos or skill that can be learned and cultivated through persistence, understanding, and tolerance [22,23]. Various factors like digital distractions, climate changes, decreased employment, and socio-emotional challenges affect student well-being, academic achievement, and social skills [24-26]. However, these can be corrected and developed through mindful exercises [27]. Physical exercise not only boosts self-confidence but also plays a vital role in enhancing self-understanding, particularly in today's digital age where understanding emotions, behaviors, strengths, and weaknesses is crucial [28,29]. Various mindfulness exercises can cultivate self-reflection. In these respects, a study by Butler et al. (2012) highlighted unique neural responses in self-face recognition using mirrors versus photographs, showing medium-dependent differences in visual self-recognition [30]. Likewise, other mindful practices, such as yoga, promote a mind-body connection, heightening awareness of bodily

sensations, thoughts, and emotions [19,29,31]. Additionally, there is evidence supporting a relationship between physical activity and self-reflection. For instance, a study by Batista et al. (2022) demonstrated that physical exercise enhances self-reflection by improving body image and self-esteem, providing insights into personal strengths and areas for growth [32]. Similarly, physical exercise significantly impacts emotional self-awareness, regulating mood through endorphin release and improving coping mechanisms. This reduces stress and anxiety levels, enhancing overall self-awareness and emotional regulation [28,31,33-35] showed that enhanced interoceptive awareness was achieved through self-focus methods, such as showing participants their faces or self-relevant words, improving accuracy in an awareness task and suggesting potential well-being [33]. In the digital era, sedentary behavior is receiving increased attention in the neuroscientific and behavioral medicine literature. However, cognitive control skills play a vital role in providing resilience to increase physical exercise and reduce sedentary behavior. This study highlights the importance of cognitive control skills in improving self-regulation related to sedentary behavior and physical exercise [35].

## CONCLUSION

Regular physical activity suggestions and various paybacks for individuals, especially students, really affect psychological well-being, self-awareness, and self-confidence. Participating in physical activity in educational settings is important for attractive emotional resilience and academic success. Scientific evidence highlights physical

activity's role in boosting self-confidence and dealing with stress among students. Moreover, mindful exercises enhance self-reflection and emotional self-awareness.

Heightened interoceptive mindfulness through self-focus approaches suggests possible well-being. Cognitive control skills connected with physical activity pay to better-quality self-regulation. These understandings highlight the standing of assimilating physical activity and mindfulness into educational curricula. In the decision, promoting regular physical activity and mindfulness among students is crucial for holistic growth. Future studies must focus on tailored interventions and their long-term impact on psychological well-being and academic success. Recommendations comprise emerging personalized physical activity programs, directing longitudinal studies, promoting interdisciplinary partnerships, encouraging community engagement, and discovering digital education integration to enhance interventions. Limitations include generalizability, methodological constraints, and resource limitations, which necessitate careful consideration. Addressing these limitations and applying evidence-based approaches will additionally improve the incorporation of physical activity and mindfulness in educational settings, promoting students' well-being and academic results.

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