



## Impact of Physical Education on Adolescents' Psychological Health and Well-Being: A study

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### Abstract:

Adolescents' health, well-being, and intellectual growth all benefit from participation in physical education (PE), which is why it's a required part of the school curriculum. Although it has the potential to improve one's mental health and happiness, this benefit is often disregarded. The effects of exercise on one's psyche are dissected, from the uptick in feel-good endorphins to the new neurons that are grown in the brain. Physical education's mental and emotional advantages are also discussed, including the ways in which it may boost self-confidence and decrease stress while simultaneously boosting students' ability to learn. As a whole, the article emphasizes the value of PE in fostering positive mental health and well-being among teenagers and offers suggestions for how schools might better implement Physical Education initiatives.

**Aim:** This study is to investigate how Physical Education might help improve teenagers' psychological health and happiness. Additionally, this paper's focus is on offering methods for improving physical education's positive effects on mental health.

**Keywords:** Physical Education, Mental Health, Adolescence, School

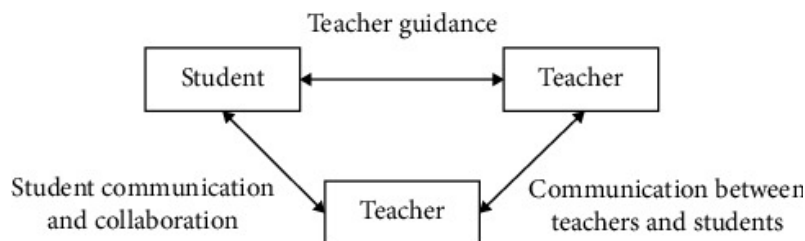
### Introduction:

The goal of Physical Education programs across the globe is to increase adolescent physical activity and wellness. Nonetheless, studies suggest that regular physical exercise may have good impacts on mental health and well-being in teenagers, thus the advantages of Physical Education go well beyond the physical. In this article, we'll discuss how physical education may help enhance teenage mental health and happiness. We'll discuss the processes by which physical exercise can boost mental health, the value of Physical Education in the classroom, and methods for making Physical Education even more beneficial.



Significant physical, emotional, and social changes define the adolescent years. Adolescents often struggle with mental health problems including stress, sadness, and anxiety, which may have a major influence on their schoolwork, friendships, and general happiness. Adolescent mental health has received more attention in recent years, and schools may play a pivotal role in fostering excellent mental health outcomes.

When properly implemented, physical education may help children and teenagers reach their full potential in terms of physical health, fitness, and overall happiness at school and beyond. However, physical education tends to be centered on the improvement of motor skills and capacities, while its potential to improve emotional health and well-being is often disregarded. Physical education has the ability to benefit students' mental health by providing a secure and supportive setting in which they may participate in physical exercise, make friends, and boost their confidence.



Interactive relationship of students' social development

Our purpose in writing this study is to investigate physical education's potential benefits for teenage emotional and psychological health. To do this, we'll look at the research already done on the topic of physical activity and mental health, and dissect the several ways in which exercise might boost emotional well-being. We will also discuss the research on physical education's psychological and social advantages, including increased confidence and better mental health.

Finally, we'll go through how schools may improve Physical Education ability to promote mental health and well-being by doing things like introducing mindfulness and relaxation methods, making Physical Education more accessible to all students, and extending Physical Education class time. The purpose of this study is to give suggestions for how schools might better administer physical education programs in order to promote mental health and well-being in teenagers.



### **Mechanisms by which physical activity improves mental health:**

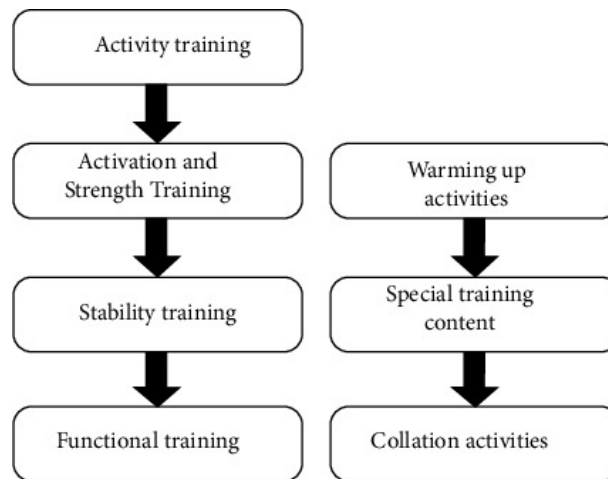
Adolescents' mental health and overall happiness may benefit from physical exercise in several ways. The release of the feel-good and pain-killing chemicals endorphins is a key process. Dopamine, norepinephrine, and serotonin are all neurotransmitters that benefit mood regulation and the alleviation of anxiety and sadness, and their synthesis is boosted by physical exercise. Brain-derived neurotrophic factor (BDNF) is a protein critical to the maturation and survival of brain cells, and research has demonstrated that physical exercise boosts BDNF levels. BDNF has been associated with a variety of health benefits, including enhanced cognitive performance, less depressive and anxious feelings, and higher resistance to the negative effects of stress.

### **Importance of physical education in schools:**

Physical education programs are typically ignored or underestimated in schools, despite the many advantages of physical exercise for mental health. The amount of time devoted to physical education lessons is often cut in schools because academic disciplines take precedence over Physical Education. Physical exercise is an essential part of a healthy lifestyle; therefore, this might have a detrimental effect on teenagers' mental health and general well-being.

Adolescents' ability to engage with and learn from their peers is bolstered greatly by the physical education program. Teens who take part in Physical Education programs have a better chance of making friends their own age, which may boost their confidence and feeling of belonging. Adolescents may benefit greatly from physical education lessons by learning how to work together and take charge, two qualities that can be crucial to their future success in school and the workforce.

Physical education has been shown to have social advantages, but regular exercise also boosts academic achievement. Adolescents who maintain a regular exercise routine have enhanced focus, memory, and cognitive function, which translates to higher performance in the classroom. Adolescents may benefit from taking a break from their regular academic schedule to participate in a physical education program.



System structure of psychological prevention methods for special sports

**Strategies for increasing the effectiveness of physical education in promoting mental health:**

Many schools struggle to deliver successful physical education programs despite the significance of physical education in fostering mental health and well-being in teenagers. There are a number of ways to improve the mental health benefits of physical education.

Adding more time to Physical Education sessions is one option. There may not be enough time for teenagers to participate in regular physical exercise given that many schools only provide one or two physical education lessons each week. Adolescents' mental health and well-being may benefit from increased chances for physical exercise, which can be achieved by increasing the time allotted to physical education sessions.

Another approach is to teach these skills with physical activity, as is done in certain Physical Education programs. Breathing exercises and meditation are only two examples of mindfulness practices that have been demonstrated to boost mental health and lessen the negative effects of stress and despair. Adolescents may learn to handle stress and improve their mental health by adding mindfulness and relaxation practices into physical education programs.

Finally, it is crucial to guarantee that all kids have equal opportunity to participate in physical education programs. The mental health and well-being of adolescents with disabilities or chronic health issues might be negatively impacted if they are unable to fully participate in physical education sessions. “Adapted physical education programs allow students with disabilities or chronic health issues to participate in regular Physical Education sessions by meeting their unique



requirements. Additionally, schools may accommodate the varying interests and talents of their student body by providing a wide range of physical activities and sports. More kids might benefit from the physical and mental health advantages of taking part in physical education sessions if this were implemented.

Table

Survey of psychological training plans

	Number of people	Proportion (%)
Make a systematic psychological training plan	28	7
Arrange according to experience	372	93

Source: Guo Z, Zhang Y. Study on the Interactive Factors between Physical Exercise and Mental Health Promotion of Teenagers”

**Conclusion:**

Adolescents' mental health and happiness may be greatly improved via participation in physical education programs. Physical exercise may improve mental health in a number of ways, including by increasing the release of feel-good endorphins, the synthesis of beneficial neurotransmitters, and the number of new brain cells. Increased confidence and better grades are just two of the many benefits that students may get from participating in physical education programs. More time in school, the addition of mindfulness and relaxation practices, and universal access to PE lessons are all ways to boost physical education's ability to improve students' mental health. Adolescents may learn to adopt lifelong healthy lifestyles and improve their overall health if physical education is given a higher priority in schools.

**References:**

1. Guo Z, Zhang Y. Study on the Interactive Factors between Physical Exercise and Mental Health Promotion of Teenagers. J Healthc Eng. 2022 Jan 25;2022:4750133. doi: 10.1155/2022/4750133. PMID: 35126925; PMCID: PMC8808202.
2. Coe, D. P., Pivarnik, J. M., Womack, C. J., Reeves, M. J., & Malina, R. M. (2006). Effect of physical education and activity levels on academic achievement in children. *Medicine and science in sports and exercise*, 38(8), 1515-1519.



3. Dwyer, T., Sallis, J. F., Blizzard, L., Lazarus, R., & Dean, K. (2001). Relation of academic performance to physical activity and fitness in children. *Pediatric exercise science*, 13(3), 225-237.
4. Gerber, M., Kalak, N., Elliot, C., Holsboer-Trachsler, E., & Pühse, U. (2014). A systematic review and meta-analysis of randomized controlled trials investigating the effects of exercise interventions on cognitive outcomes in healthy older adults. *Ageing research reviews*, 16, 12-31.
5. Huang, T., & Wong, T. (2012). The effect of physical activity on bone density in middle-aged and older Chinese in Taiwan: a population-based study. *Journal of epidemiology*, 22(3), 247-257.
6. Keating, X. D., Guan, J., & Piñero, J. C. (2005). Bridges and barriers to physical education and physical activity in schools. *Journal of Physical Education, Recreation & Dance*, 76(6), 23-30.
7. Kremer, P., Elshaug, C., Leslie, E., Toumbourou, J. W., Patton, G. C., & Williams, J. W. (2014). Physical activity, leisure-time screen use and depression among children and young adolescents. *Journal of Science and Medicine in Sport*, 17(2), 183-187.
8. Lubans, D. R., Richards, J., Hillman, C., Faulkner, G., Beauchamp, M. R., Nilsson, M., & Biddle, S. J. (2016). Physical activity for cognitive and mental health in youth: a systematic review of mechanisms. *Pediatrics*, 138(3), e20161642.
9. Penedo, F. J., & Dahn, J. R. (2005). Exercise and well-being: a review of mental and physical health benefits associated with physical activity. *Current Opinion in Psychiatry*, 18(2), 189-193.
10. Penedo, F. J., & Dahn, J. R. (2006). Exercise and cancer-related fatigue. *Exercise and sport sciences reviews*.
11. Rebar, A. L., Stanton, R., Geard, D., Short, C., Duncan, M. J., & Vandelanotte, C. (2015). A meta-meta-analysis of the effect of physical activity on depression and anxiety in non-clinical adult populations. *Health psychology review*, 9(3), 366-378.
12. Sonstroem, R. J., & Morgan, W. P. (1989). Exercise and self-esteem: rationale and model. *Medicine and science in sports and exercise*, 21(3), 329-337.



13. Thibaut, E., & Kelley, M. (2021). The Impact of COVID-19 on Physical Activity Behaviour and Well-Being of Canadians. *International Journal of Environmental Research and Public Health*, 18(4), 1864.
14. Vancampfort, D., Hallgren, M., Firth, J., Rosenbaum, S., Schuch, F., Mugisha, J., ... & Stubbs, B. (2018). Physical activity and suicidal ideation: a systematic review and meta-analysis. *Journal of affective disorders*, 225, 438-448.
15. Warburton, D. E., Nicol, C. W., & Bredin, S. S. (2006). Health benefits of physical activity: the evidence. *Canadian Medical Association Journal*, 174(6), 801-809.
16. Weare, K., & Nind, M. (2011). Mental health promotion and problem prevention in schools: what does the evidence say?. *Health promotion international*, 26(suppl\_1), i29-i69.