



**THE IMPACT OF FITNESS EXERCISE ON TEENAGERS' MENTAL HEALTH:
REDUCING STRESS AND ENHANCING SELF-CONFIDENCE**

Mihai MĂRGINEAN

”Ștefan cel Mare” University of Suceava, Romania

mihai.marginean00@gmail.com

Abstract

In a society defined by an increasing amount of stress and social pressure, teenagers' mental health has become a major concern. Exercises, especially fitness programs, have been proven to be an efficient way to decrease stress and improve self-esteem in this age category. The aim of this study is to address questions regarding the relationship between physical exercise and youth mental health, focusing on the reduction of stress levels and the strengthening of self-esteem, by analyzing the perspectives of recognized authors. Based on a detailed analysis of the field literature, a considerable connection was found between regular physical exercise and the decline in anxiety and stress levels, as well as the improvement of self-esteem and physical ability. The results of the study highlight the importance of including fitness in teenagers' daily routines as an accessible and efficient way to sustain mental health and general well-being, analyzing the perspectives of scientists.

Key-words: *teenagers, physical exercises, mental health, stress relief, self-esteem improvement.*

Introduction:

In the last decades, teenagers' mental health has become a major global concern as more and more teenagers face stress and anxiety caused by social, academic and economical pressure. Physical activity stimulates mental capacity, making a significative contribution to a healthy brain throughout the adolescence, the period of neurobiological development in flux

(Wassenaar, 2021). Physical activity positively stimulates mental capacity, contributing to a healthy brain throughout adolescence, a period of neurobiological development in flux (Wassenaar, 2021). Physical exercises, especially fitness programs, have been increasingly recognized as an efficient method to support mental health.

The benefits of physical activity for the body are well known, but the profound effects on emotional balance and on physical aspects are being studied more frequently. Scientists sustain that the pupils who achieved the recommendations for an intense physical activity, were less probably to report a poor mental health (Vankim, 2013). Being an active person not only helps maintain physical health but also decreases stress and increases self-esteem.

In the digital era, teenagers are dealing with an increasing level of stress and social pressure, exacerbated by rapidly changing lifestyles and high exposure to social media. In this context, mental health has become a key subject for professionals, while studies show that high physical activity is positively associated with various dimensions of mental health, especially among high school students (Guddal, 2019). Some longitudinal and cross-sectional research studies have outlined relevant correlations between certain types of sports and the reduction of psychological problems (such as depression, stress, negative affect, and general psychological discomfort), as well as an improvement in mental well-being (including self-image, life satisfaction, happiness, and overall wellness). Additionally, important correlations have been noticed between increased levels of sedentariness and the enhancement of psychological problems (for instance, depression) together with a decline in psychological wellness (for example, life satisfaction and happiness) among young people, including children and teenagers (Rodriguez, 2019).

A primary goal of the present research is to determine the extent to which experts agree on the positive effects of exercise on stress level reduction and to analyze the arguments and limitations presented by each author.

Another purpose is to critically examine the various points of view regarding the influence of fitness exercises on teenagers' self-esteem. This study aims to clarify whether experts unanimously support the idea that physical activity improves self-esteem or if there are contradictory opinions based on factors such as the type of exercise and its frequency.

A third aim is to identify different perspectives regarding the extent to which fitness could be a reliable and affordable solution for youth mental health within their routines. The analysis will highlight both areas of consensus and points of divergence in specialized literature to obtain a clearer understanding of the real impact of fitness exercises on psychological well-being.

The Basics of the Research

The research hypothesis can be formulated as: *Is there a direct connection between stress management and the improvement of self-esteem?* In other words, can a well-structured physical exercise program provide young people with an effective way to manage daily stress and develop a positive self-image?

Using the analytical method, this research takes the form of a critical analysis of the field literature. Articles were chosen from academic databases (PubMed) using keywords such as *fitness and mental health*, *exercise and stress*, and *exercise and self-esteem in young people*. The inclusion criteria focused on studies involving youth aged 12 to 25 years old, published in the last decade, where the effects of physical workouts on psychological well-being and responses to stress reduction and self-confidence improvement were measured.

About Daily Stress

Daily stress has become a part of modern life and is caused by numerous factors, ranging from work demands and social obligations to personal expectations. In an increasingly connected society, prolonged exposure to stress can have profound effects on mental and physical health. In the long term, this type of stress contributes not only to physical exhaustion but also to the development of health issues. Effectively managing daily challenges and identifying stress-reducing strategies are essential for maintaining a balance between external expectations and internal well-being.

Studies show that stress can lead to a series of health problems, such as anxiety, depression, and cardiovascular diseases. Poor stress management can also worsen pre-existing health conditions and affect quality of life. Developing effective strategies, such as relaxation techniques, regular physical activity, and maintaining a healthy balance between personal and professional life, is essential for coping with everyday stress (Haight, 2023).

About the Improvement of Self-Confidence

Self-image refers to how a person perceives their value and appearance, which has profound effects on self-esteem, social relationships, and mental health. For adults, it may influence professional identity, self-confidence, and the ability to manage personal relationships. However, for teenagers and young adults, self-image plays an even more crucial role due to intense mood fluctuations and social pressures.

Teenagers are highly sensitive to expectations and opinions from their social environment, including social media, which can increase self-doubt. A positive self-image is essential for harmonious development, as it promotes emotional well-being and healthy social integration. Conversely, a negative self-image may increase the risk of anxiety, depression, and adaptation difficulties.

Certain studies have investigated how self-image, self-esteem, and depression affect overweight and non-overweight children aged 8 to 14 years. These studies found that many obese children wished to be slimmer and had lower self-confidence than their non-obese peers. A connection between self-esteem and depressive symptoms was discovered, highlighting the significant role body image plays in children's mental health (Sánchez-Rojas, 2022).

Interpretations of the scientific results

This section further specifies the study's results regarding the influence of fitness exercises on youth mental health, focusing on stress reduction and self-image improvement. The outcome will be analyzed through a critical approach by reviewing experts' points of view. On the one hand, some scientists underline a clear connection between young people involved in organized and regular sports activities and better general health conditions. They spent less time in front of screens and had a shorter sleep schedule (Yman, 2023). On the other hand, other scientists take a more cautious approach, highlighting the concept of individual differences and the varying effects based on the type and frequency of physical activity (Paolucci, 2018). The results of the analysis will explore different positions to highlight not only the coherence but also the debated aspects of the field's literature, providing a balanced perspective on the impact of fitness exercises on teenagers' mental health.

The first argument can be identified in Paolucci (2018), who emphasizes a strong correlation between the intensity of physical activity and the reduction of depressive symptoms and inflammatory reactions, both crucial elements for psychological health. He argues that higher-intensity physical exercises may contribute to reduced tension and improved emotional well-being, variables that positively impact young people's self-image, directly influencing depression and inflammatory reactions. His work also claims that not all types of exercise produce the same psychological effects, stressing that more challenging physical activities are associated with a significant reduction in stress and anxiety. Therefore, this highlights not only the importance of direct participation in physical exercise but also its intensity. These aspects align with Wassenaar (2021), who examines the impact of intense physical activity interventions on physical fitness, cognitive performance, and teenagers' mental health.

Although Wassenaar provides an extensive analysis of the effects of physical exercise on various aspects of well-being, the approach remains general. The assessment includes overall consequences for mental health but does not focus on the biological and psychological processes that mediate these benefits.

The second argument can be identified in Vankim (2013), who highlights a specific relationship between vigorous sports activities and reduced perceived stress. He emphasizes that intense exercises can improve psychological well-being by lowering stress levels and promoting positive social interactions. This adds further value to the investigation of the psychological effects of physical exercise, supporting the idea that active participation in intense workouts can alleviate psychological tension and facilitate social connections. On the other hand, Guddal (2019) offers a broader perspective, assessing how participation in sports and physical activities boosts teenagers' mental health at different ages. This approach has the advantage of illustrating the variations in the relationship between physical activity and mental health as young people grow. However, it does not delve into the specific mechanisms through which intense sports reduce stress and influence social interactions.

Furthermore, Rodriguez-Ayllon (2019) emphasizes the importance of regular physical activity for children and teenagers' mental health, as well as the negative outcomes associated with sedentary behavior. Their research shows that increased physical activity is linked to reduced anxiety and depressive symptoms, overall well-being, and enhanced cognitive function. Additionally, the authors argue that reducing sedentary behavior, such as prolonged sitting and screen time, has positive effects on mental health. They add that encouraging children and young people to be more active is crucial because such behavior can help reduce the risk of mental health problems. Even so, they underline that the outcomes vary depending on the intensity and type of exercise, and further research is necessary to explore the relationship between these variables and psychological benefits in more depth.

Yman (2023) investigates the effects of organized sports on general mental health, stress levels, sleep patterns, and screen time. The experts conclude that organized sports provide structure and a social environment that significantly reduces stress and promotes a balanced lifestyle. Their study indicates that regular participation in organized sports not only decreases sedentary behavior but also improves sleep quality, which is crucial for overall health and teenagers' well-being. According to Yman (2023), involvement in organized sports provides numerous psychological benefits, fostering a sense of belonging and strengthening social relationships. These factors help mitigate stress symptoms and contribute to the development of a positive

self-image. However, the authors note that the benefits of sports activities can vary depending on the frequency of participation, and further studies are needed to determine the impact of these variables on mental health.

Rodriguez-Ayllon (2019) suggests that physical activity plays a general role in maintaining mental health and reducing sedentary behavior. They underline that structured physical exercise can have positive psychological effects on children and teenagers. By contrast, Yman (2023) emphasizes the benefits of structured sports activities as a key promoter of mental health, focusing on the social aspects and the organized nature of sports in minimizing stress and improving quality of life.

Conclusion

To sum up, this study highlights the importance of physical activity as beneficial to young people's mental health, particularly in reducing stress and improving self-image. A comprehensive analysis of scientific literature indicates a strong positive connection between vigorous physical activity and psychological wellness, supporting the hypothesis that structured exercise can be an effective method for improving teenagers' emotional state.

The examination of research confirms the thesis that a well-organized fitness program can be a reliable tool for reducing stress, enhancing young people's self-image, and supporting mental health. This underscores the necessity of integrating physical activity into teenagers' daily routines in an environment that promotes mental health and balanced personal development.

References

- Guddal, M. H. et al (2019), Physical activity and sport participation among adolescents: associations with mental health in different age groups. Results from the Young-HUNT study: a cross-sectional survey. *BMJ open*, 9(9), e028555. <https://doi.org/10.1136/bmjopen-2018-028555>
- Haight, B. L. et al (2023). Combined effects of cumulative stress and daily stressors on daily health. *Health psychology: official journal of the Division of Health Psychology, American Psychological Association*, 42(5), 325–334. <https://doi.org/10.1037/hea0001281>
- Paolucci, E. M. et al (2018), Exercise reduces depression and inflammation but intensity matters. *Biological psychology*, 133, 79–84. <https://doi.org/10.1016/j.biopsycho.2018.01.015>
- Rodriguez-Ayllon et. al (2019), Role of Physical Activity and Sedentary Behavior in the Mental Health of Preschoolers, Children and Adolescents: A Systematic Review and Meta-Analysis. *Sports medicine (Auckland, N.Z.)*, 49(9), 1383–1410. <https://doi.org/10.1007/s40279-019-01099-5>

- Sánchez-Rojas, A. A. et al (2022). Self-image, self-esteem and depression in children and adolescenta with and without obesity. Autoimagen, autoestima y depresión en escolares y adolescentes con y sin obesidad. Gaceta medica de Mexico, 158(3), 118–123. <https://doi.org/10.24875/GMM.M22000653>
- Vankim, N. A. et al (2013), Vigorous physical activity, mental health, perceived stress, and socializing among college students. American journal of health promotion: AJHP, 28(1), 7–15. <https://doi.org/10.4278/ajhp.111101-QUAN-395>
- Wassenaar, T. M. et al (2021), The effect of a one-year vigorous physical activity intervention on fitness, cognitive performance and mental health in young adolescents: the Fit to Study cluster randomised controlled trial. The international journal of behavioural nutrition and physical activity, 18(1), 47. <https://doi.org/10.1186/s12966-021-01113-y>
- Yman, J. et al (2023), Associations between organised sports participation, general health, stress, screen-time and sleep duration in adolescents. Acta paediatrica (Oslo, Norway: 1992), 112(3), 452–459. <https://doi.org/10.1111/apa.16556>