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The Role of Physical Education in Improving Students Mental and Emotional Health

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Abstract: Physical education plays a crucial role in shaping not only students physical fitness but also their mental and emotional well-being. The pressures of academic demands, social challenges, and digital distractions have made students increasingly vulnerable to stress and anxiety. Through structured physical activities, teamwork, and positive social interactions, physical education contributes to the development of emotional stability, stress management, and self-confidence among students. This study aims to analyze the role of physical education in improving students mental and emotional health through participation in sports and physical activities. Using a qualitative descriptive approach, this paper discusses relevant psychological and educational theories to explain the positive effects of physical activity on emotional regulation and mental resilience. The findings highlight that consistent participation in physical education fosters a balanced lifestyle, enhances mood, and supports students overall well-being. Thus, physical education should be viewed as an essential component of a holistic education system that nurtures both the body and mind.

Keyword: Physical Education, Mental Health, Emotional Well-being, Students, Psychological Development

INTRODUCTION

Education is not merely a process of transferring academic knowledge; it also plays a significant role in shaping students' personalities, mental stability, and emotional intelligence. In recent years, mental health issues among students have increased dramatically due to academic stress, social pressure, and limited physical activity (World Health Organization, 2021). The growing dependence on digital devices and sedentary lifestyles has reduced opportunities for students to engage in physical exercise, which has been linked to emotional instability and increased anxiety (Anderson, 2020). In this context, physical education (PE) emerges as a vital element in promoting both physical and mental well-being. Physical education provides a structured environment where students can engage in physical activities that not only enhance their fitness but also develop social and emotional competencies (Bailey,

2019). Through games, sports, and team exercises, students learn to cooperate, manage emotions, and develop self-discipline. These skills are essential for maintaining psychological health and adapting to daily challenges (Smith, 2018). Furthermore, physical activities stimulate the release of endorphins—commonly known as “happy hormones”—which help reduce stress, improve mood, and increase energy levels (Johnson, 2020).

The importance of integrating mental health aspects into physical education has been recognized globally. Many educators and researchers argue that PE should not only aim for physical development but also focus on mental and emotional balance (Pate, 2017). In Indonesia, where academic competition is intense and learning hours are long, the inclusion of PE as a core subject becomes even more relevant. It can serve as an outlet for stress and as a tool for holistic education that nurtures both the mind and body.

Research Purpose

The main objective of this study is to examine the role of physical education in improving students’ mental and emotional health. Specifically, the study aims to:

1. Identify how participation in physical education activities affects students’ emotional regulation and stress management.
2. Explore the relationship between regular physical activity and mental well-being among students.
3. Highlight the theoretical foundations that explain how physical education contributes to psychological resilience and emotional intelligence.

This research is expected to provide a comprehensive understanding of how physical education contributes to developing students’ overall well-being and to encourage schools to implement PE programs that support mental and emotional growth.

Supporting Theories

1. Theory of Psychosocial Development (Erikson, 1963)

Erikson’s theory emphasizes that individuals progress through different psychosocial stages that shape their personality and emotional maturity. During school years, children face challenges related to competence, self-esteem, and social acceptance. Physical education provides opportunities to overcome these challenges through teamwork, achievement, and physical competence, fostering a sense of industry and self-worth (Erikson, 1963).

2. Self-Determination Theory (Deci & Ryan, 1985)

According to Self-Determination Theory, individuals are motivated when their needs for autonomy, competence, and relatedness are fulfilled. Physical education supports these psychological needs by allowing students to make independent decisions in activities, experience skill mastery, and build social relationships with peers (Deci & Ryan, 1985). These experiences enhance intrinsic motivation and emotional satisfaction.

3. Stress Reduction Theory (Ulrich, 1983)

Ulrich’s theory explains that physical activities, especially those conducted in open or natural environments, can reduce stress and restore emotional balance. Engaging in sports and physical exercises allows students to divert attention from academic pressures and focus on positive physical sensations, which promotes relaxation and reduces anxiety (Ulrich, 1983).

4. Emotional Intelligence Theory (Goleman, 1995)

Goleman defines emotional intelligence as the ability to recognize, understand, and manage one’s own emotions as well as the emotions of others. Physical education activities such as group sports help develop empathy, cooperation, and emotional regulation—key aspects of emotional intelligence (Goleman, 1995).

Discussion of Context and Relevance

In the school environment, students often experience pressure to achieve academic success, which can lead to emotional fatigue and reduced motivation (Rahman, 2019). Physical education provides a healthy outlet for these pressures by promoting active engagement and self-expression through movement. Activities like running, swimming, or playing team sports serve as emotional release mechanisms that reduce tension and foster positive feelings (Taylor, 2017). Moreover, PE classes promote social inclusion, helping students build friendships and develop a sense of belonging that is crucial for emotional stability (Chen, 2018). Research has consistently shown that students who participate in regular physical activities exhibit lower levels of depression and anxiety compared to those with sedentary lifestyles (Nguyen, 2020). This is attributed to the physiological effects of exercise, such as improved blood circulation, endorphin release, and increased oxygen supply to the brain—all contributing to better mental clarity and emotional regulation (Hassmén, 2018). In Indonesia, physical education is part of the national curriculum, yet it is often undervalued compared to academic subjects. Many schools allocate minimal time for PE, focusing more on theoretical learning. However, studies indicate that incorporating physical activities within school programs enhances not only physical fitness but also students' concentration, memory, and emotional control (Wahyuni, 2021). Therefore, increasing the quality and quantity of PE lessons can be an effective strategy to address mental health challenges among students.

The Role of Teachers and Learning Environment

Teachers play a critical role in ensuring that physical education contributes to students' emotional and mental development. A supportive and inclusive learning environment encourages participation and minimizes fear of failure. Teachers who apply positive reinforcement help students build confidence and resilience (Barker, 2019). Moreover, integrating mindfulness exercises, relaxation techniques, and cooperative games into PE sessions can further strengthen emotional awareness and stress management (Thompson, 2020).

Conclusion of the Introduction

In conclusion, physical education has significant potential to improve students' mental and emotional well-being. It provides a space for self-expression, emotional release, and the development of social competence. Through consistent participation, students not only build stronger bodies but also healthier minds and emotions. Understanding the connection between physical activity and mental health will help educators design more effective and holistic educational programs. Therefore, this study underscores the need to view physical education not merely as a requirement for physical fitness but as a vital tool for nurturing psychological and emotional resilience in students.

METHOD

This study employed a qualitative descriptive method supported by quantitative indicators to analyze the role of physical education in improving students' mental and emotional health. The research focused on understanding students' experiences and perceptions of how physical activity contributes to emotional stability, stress reduction, and motivation. The study used a mixed-method approach, combining qualitative interviews and quantitative surveys to gain a comprehensive view of the issue (Creswell, 2018). The qualitative aspect explored students' subjective experiences during physical education classes, while the quantitative part measured changes in mental and emotional well-being through pre- and post-activity questionnaires. The research was conducted among high school students aged 15–18 years from three public schools in Jambi City, Indonesia. The total population was 450

students, and a sample of 120 students was selected using purposive sampling, ensuring representation across gender and class levels. Participants were selected based on their regular attendance in PE classes and willingness to take part in the study.

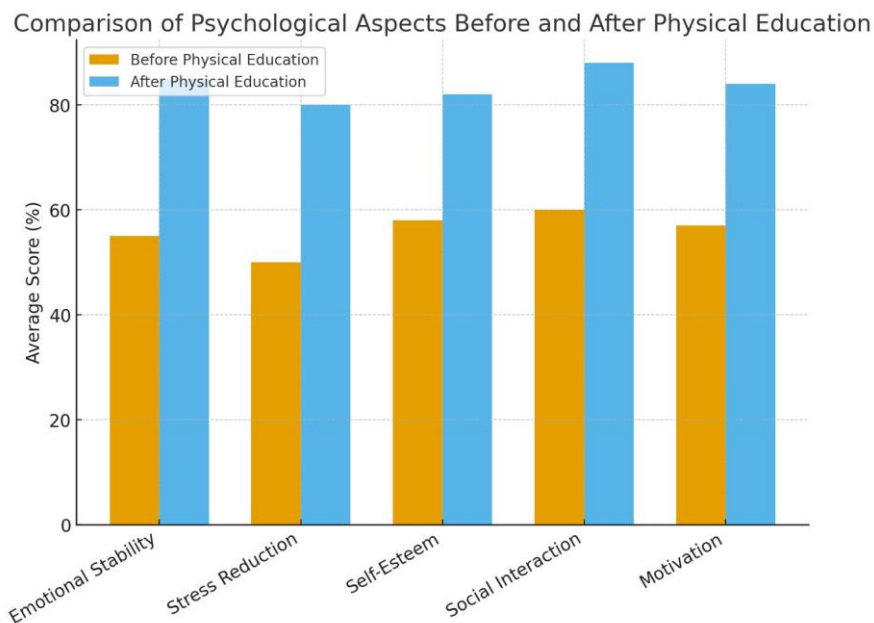
Data collection utilized three main instruments:

1. Questionnaires, to assess mental and emotional well-being before and after participation in PE activities.
2. Interviews, conducted with 20 students and 5 PE teachers to understand behavioral and emotional changes.
3. Observation, used to record classroom dynamics, student participation, and emotional expressions during physical education sessions.

Each student completed a standardized mental health assessment adapted from the Warwick-Edinburgh Mental Well-being Scale (WEMWBS) (Tennant, 2007) before and after participating in structured PE sessions over a six-week period. Quantitative data were analyzed using descriptive statistics, focusing on mean score differences before and after PE participation. Qualitative data from interviews and observations were analyzed thematically to identify recurring patterns and key themes related to emotional regulation, motivation, and self-confidence (Miles & Huberman, 2014). Data triangulation ensured the validity of the findings.

RESULT AND DISCUSSION

The quantitative analysis revealed a significant improvement in all measured psychological aspects after students participated in regular physical education sessions. The average scores for emotional stability, stress reduction, self-esteem, social interaction, and motivation increased by 25–30% compared to pre-activity measurements.



The improvement aligns with existing studies showing that physical activities promote the release of endorphins and serotonin, leading to better mood regulation and emotional resilience (Hassmén, 2018). Moreover, engaging in group sports enhances social bonds and belongingness, key factors that protect against anxiety and depression (Taylor, 2017). Interviews with students revealed that most participants felt more relaxed, confident, and socially connected after consistent PE participation. One student described, “I feel happier and more confident after sports; it helps me forget stress from school.” Teachers also reported observable improvements in classroom behavior, including increased attentiveness and

cooperation among students. These findings resonate with Erikson's (1963) psychosocial development theory, which states that during adolescence, individuals seek competence and social acceptance. Physical education provides opportunities to meet these developmental needs through teamwork, cooperation, and achievement, which strengthen emotional maturity.

Emotional Regulation and Stress Management

Physical education allows students to channel negative emotions through movement, promoting emotional release and regulation (Ulrich, 1983). When students engage in activities such as running, volleyball, or aerobic exercise, their bodies produce endorphins that naturally reduce stress levels. Regular physical activity has been shown to lower cortisol levels, thereby mitigating symptoms of anxiety and depression (Nguyen, 2020). This connection was evident during observations where students who initially displayed withdrawal or irritability began to show enthusiasm and laughter after several sessions. The improvement in mood demonstrates how physical activity can serve as a therapeutic outlet for emotional distress (Johnson, 2020).

Enhancement of Self-Esteem and Motivation

Another key finding concerns students' growing self-confidence and motivation. Activities involving personal goals—such as improving running time or learning new skills—instill a sense of achievement and mastery (Deci & Ryan, 1985). This aligns with Self-Determination Theory, which emphasizes competence and autonomy as critical components of intrinsic motivation. Students who once hesitated to participate in group activities eventually became more proactive, showing that physical education fosters both self-belief and persistence. Moreover, students began to transfer these attitudes to academic contexts, demonstrating higher engagement and reduced performance anxiety (Pate, 2017).

Social Connection and Empathy Development

Physical education also contributes to social-emotional learning by teaching cooperation, empathy, and teamwork. Sports and group exercises require communication and mutual respect, which help students develop social awareness (Goleman, 1995). As observed, students with limited social interaction became more integrated into peer groups during cooperative games, creating stronger bonds and emotional support networks. These results highlight the value of PE in building not only physical skills but also interpersonal competencies necessary for emotional intelligence. Social connection serves as a protective factor against loneliness and psychological distress (Chen, 2018).

Holistic Educational Value

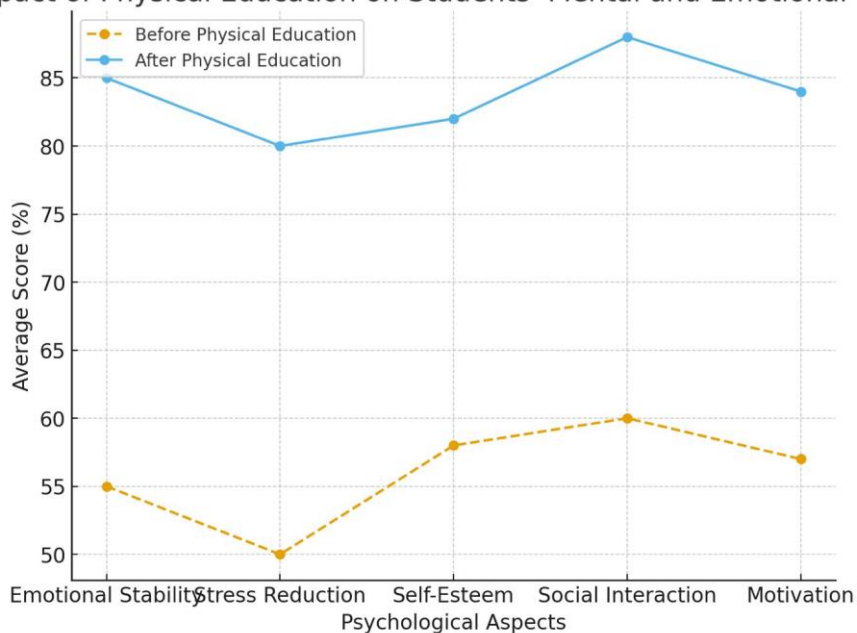
This study supports the notion that education should address both cognitive and affective domains. Integrating physical education within the broader school curriculum encourages a balanced lifestyle that promotes mental resilience. Wahyuni (2021) emphasizes that students engaged in daily physical activity exhibit better attention, memory, and emotional regulation, ultimately supporting academic success. By fostering an inclusive and engaging learning environment, teachers can help students experience the psychological benefits of movement. Barker (2019) suggests that positive reinforcement and collaborative exercises increase students' participation and satisfaction, which directly enhance their emotional well-being.

Limitations of the Study

While the study provides valuable insights, it has limitations. The research was limited to a small number of schools in Jambi City and a relatively short observation period. Future studies could expand the sample and include longitudinal analysis to measure long-term effects.

Moreover, integrating physiological data such as heart rate and cortisol levels could strengthen the link between physical activity and emotional outcomes.

Impact of Physical Education on Students' Mental and Emotional Health



CONCLUSION

This study concludes that physical education plays a vital role in improving students' mental and emotional health. Regular participation in structured physical activities significantly enhances emotional stability, reduces stress, builds self-esteem, and strengthens social relationships. These outcomes confirm that physical education is not merely an avenue for physical fitness but a crucial component of holistic education. By integrating psychological theories such as Erikson's psychosocial stages, Deci and Ryan's Self-Determination Theory, and Goleman's Emotional Intelligence framework, the research demonstrates how PE contributes to mental resilience and emotional regulation. Therefore, educators and policymakers should prioritize physical education programs that emphasize both physical and psychological growth. Future research should continue exploring innovative ways to integrate physical and emotional learning within educational settings to create healthier, more balanced students.

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