



THE IMPACT OF THE SCHOOL ENVIRONMENT ON STUDENTS' PHYSICAL ACTIVITY

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Abstract

The school environment has a very important role in determining the level of physical activity of students. This study aims to analyze the impact of the school environment on students' physical activity, focusing on sports facilities, green open spaces, and school policies. Through quantitative and qualitative approaches, data were collected from surveys and interviews with students and teachers in several schools in Makassar. The results showed that schools with adequate sports facilities and a supportive environment tend to have more physically active students. This research is expected to provide recommendations for the development of better education policies.



Keywords: School Environment,
Physical Activity, Sports Facilities,
Student Health, Physical Education

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INTRODUCTION

Physical activity plays a crucial role in the growth and development of children and adolescents, not only in terms of physical health, but also mental and social well-being. The World Health Organization (WHO) has recommended that children and adolescents should engage in moderate to vigorous intensity physical activity for at least 60 minutes every day. Adequate physical activity is believed to reduce the risk of various chronic diseases, including obesity, type 2 diabetes, and mental health disorders such as depression and anxiety. However, in reality, data in various regions, including Makassar, shows that many students have not met this physical activity standard. This condition is a serious concern as it could potentially have a long-term negative impact on the health of the younger generation.

One of the determining factors that influence students' physical activity levels is the school environment. As the main place where students spend most of their time, schools have a strategic role in shaping healthy living habits, including physical activity. A conducive school environment can include the availability of adequate sports facilities, safe and comfortable green open spaces, and school designs that support active mobility such as walking paths or large play areas. Such an environment not only provides the physical means to move, but also creates an atmosphere that motivates students to actively participate in physical activities. Sallis et al. (2012) stated that schools with well-equipped sports facilities and a supportive environment can significantly increase the physical activity participation of children and adolescents.

In the Indonesian context, research by Rahmawati and Susanto (2023) corroborates these findings by showing that sports facilities available in schools in major cities are still very limited, especially in public schools that experience budget constraints. They asserted that this limitation has a direct impact on students' low physical activity, which then contributes to an increase in obesity cases and other health problems. In addition, research by Prasetyo et al. (2024) highlighted the importance of green open spaces in the school environment as an effective medium to increase students' physical activity while supporting their mental health. They stated that the presence of green open spaces not only encourages physical activity but also contributes to reducing stress and improving students' concentration.

In addition to physical facilities, the safety and comfort of the school environment are also important factors that influence students' physical activity levels. A safe and clean environment provides a sense of comfort for students to do activities outside the classroom, both during recess and in extracurricular activities. According to Santoso and Wulandari (2022), students' perceptions of the safety of the school environment greatly influence their activeness in doing sports and other physical activities. Schools that have good supervision, maintained cleanliness, and easily accessible facilities can be a positive stimulus that encourages students to move more actively.

From the perspective of social environment theory and behaviorism, the school environment acts as a stimulus that influences student behavior. A positive stimulus in the form of complete facilities and a pleasant atmosphere can strengthen students' motivation and habits to be physically active. Conversely, a less supportive environment can inhibit this behavior. In this case, the role of schools and government becomes very strategic to optimize the management of the school environment to support physical activity in a sustainable manner. Improving the quality of sports facilities, providing adequate green open spaces, and creating a safe and comfortable environment should be prioritized in education and health policies.

Taking into account these findings and expert opinions, this study aims not only to identify the relationship between the school environment and students' physical activity, but also to provide practical recommendations for schools and the government in improving the quality of the school environment. These measures are expected to increase students' awareness and participation in physical activity, thus creating a healthy, active and productive generation. Improving the school environment as a holistic learning medium is also in line with national education goals to shape students' character and overall health.

METHODS

This study adopted a quantitative approach with a descriptive survey design that aims to describe systematically and measurably the relationship between school environment variables and students' physical activity. The quantitative approach was chosen because it allows researchers to collect data in the form of numbers that are objective and can be analyzed statistically to test hypotheses or see relationships between variables empirically. Descriptive survey design is very appropriate to use because this research aims to identify and describe the characteristics that exist in the field without intervening or manipulating variables.

The research sample consisted of 200 elementary school students in Makassar city who were selected using stratified random sampling technique. This technique is done by dividing the student population into strata or groups based on certain criteria, such as class or gender, then randomly taking samples from each stratum. The selection of this method aims to ensure the representativeness of the sample so that the results of the study can describe the condition of the population more accurately and reduce sampling bias.

The survey included questions on the frequency and types of physical activities that students engage in as well as an assessment of sports facilities at school. In addition, in-depth interviews were conducted with 15 physical education teachers to obtain their views on the influence of the school environment on students' physical activity. Data were analyzed using descriptive statistics and thematic analysis, which allowed the researcher to get a more comprehensive picture of the factors that influence students' physical activity.

The main instrument used in this study was a questionnaire specifically designed to measure several aspects of the main variables. First, the characteristics of the school's physical environment were measured through indicators of safety, cleanliness and comfort. This aspect reflects the physical condition of the school that can affect students' comfort and motivation to engage in physical activity. Second, the availability and quality of sports facilities is an important variable because adequate and quality facilities are believed to be able to encourage students to be more active in sports and physical movement. Third, the frequency and duration of students' physical activity are measured to find out how often and how long students do physical activity in their daily lives.

After the data was collected, the analysis was conducted using multiple linear regression. This analysis technique was chosen because it allows to test the simultaneous effect of several independent variables, namely the characteristics of the school physical environment and sports facilities, on the dependent variable, namely students' physical activity. Multiple linear regression also helps in determining how much each independent variable contributes to the dependent variable and whether the effect is statistically significant. Thus, this analysis not only tests the existence of a relationship, but also comprehensively measures the strength and direction of the relationship between variables.

Overall, the methods used provide a systematic and measurable approach to understanding the impact of the school environment on students' physical activity, while providing empirical data that can be used as a basis for policy making and improving the school environment to improve students' health and well-being.

RESULT AND DISCUSSION

The results of multiple linear regression analysis showed that the school physical environment variable had a regression coefficient (β) of 0.45 with a significance value of p less than 0.01. This indicates that there is a significant positive relationship between the quality of the school physical environment and students' physical activity level. That is, the more conducive and good the school physical environment-which includes aspects of safety, cleanliness, and comfort-the higher the tendency of students to engage in physical activity. Similarly, the sports facilities variable has a regression coefficient of 0.38 with a highly significant level of significance ($p < 0.01$). This finding indicates that the availability and quality of sports facilities in schools play an important role in encouraging students to be physically active.

Practically, these results suggest that a supportive physical environment and the availability of adequate sports facilities are key factors that motivate students to increase the frequency and duration of their physical activity. A safe and comfortable environment can create a sense of comfort and tranquility so that students are more motivated to participate in physical

activities such as sports or outdoor games. In addition, the existence of complete and well-maintained sports facilities provides real opportunities for students to perform various physical activities in a fun and varied way, thus reducing boredom and increasing interest in exercising.

This finding is in line with the results of previous research by Sallis et al. (2012), which confirmed the important role of the school environment as a determining factor in the physical activity behavior of children and adolescents. In the study, it was explained that schools that provide a supportive physical environment, including well-equipped sports facilities and open space designs that allow active movement, can significantly increase students' physical activity levels. This underlines that not only individual factors, but also external environmental factors have a great contribution in shaping students' physical behavior.

In addition, from the perspective of behavioristic theory developed by Skinner (1953), the environment functions as a stimulus that triggers or inhibits certain behaviors. In this context, a positive stimulus in the form of a comfortable physical environment and adequate sports facilities acts as a reinforcement that encourages students to do physical activity regularly. In other words, a pleasant school environment that provides easy access to sports facilities can trigger active behavioral responses from students, which in turn form positive exercise habits. Conversely, a less supportive environment or inadequate sports facilities can be an obstacle that reduces students' motivation to be active.

Thus, the results of this study not only strengthen the empirical understanding of the relationship between school environment and students' physical activity, but also provide a strong theoretical foundation for intervention efforts that focus on improving the school environment. Better school physical environments and the development of quality sports facilities are important strategies to improve students' health and well-being through sustained increases in physical activity.

The physical environment of schools also plays an important role in facilitating physical activity. Green open spaces, such as parks and fields, provide safe and comfortable places for students to be active. Research shows that students who have access to green open spaces are more likely to engage in physical activity compared to those who do not. For example, students who can play in parks or fields after school hours have more opportunities to exercise and socialize with their friends. This suggests that the presence of green open spaces not only supports physical activity, but also contributes to students' social and emotional development.

However, while good facilities and policies exist, challenges remain in encouraging students to be physically active. One of the main challenges is the influence of technology and modern lifestyles that tend to lead to sedentary behavior. Many students would rather spend time in front of a screen than exercise. Therefore, it is important for schools to develop programs that not only provide facilities but also educate students on the importance of physical activity and healthy lifestyles. For example, programs that engage students in fun and competitive sports activities can attract their interest to participate more actively.

Supporting Factors	Description
Green Open Space	Provides safe and convenient access for physical activity, positively contributing to student engagement in sports and social interaction.
Technology Influence Challenge	Sedentary lifestyle due to high usage of digital devices hinders students' physical activity.
Education and Activity Programs	It is important to offset the challenges with engaging and educational sports programs to increase student motivation.

CONCLUSION

The school environment has a significant impact on students' physical activity. Schools that provide good sports facilities and policies that support physical activity tend to have more active students. Therefore, it is recommended that schools and the government pay attention to the development of sports facilities and policies that support students' physical activity. Further research is also needed to explore other factors that may influence students' physical activity, such as parental and community support. By creating a supportive environment, we can help students to develop healthy habits that will benefit them in the future.

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