

**The Relationship Between Physical Literacy and Student Participation in
Physical Education Learning**Takhwin Peryoga¹, Yudy Hendrayana^{2*}, Reshandi Nugraha³¹²³ Health and Recreation Physical Education, Faculty of Sports and Health Education,
Universitas Pendidikan Indonesia, Bandung, Indonesia.**Keywords**Physical Literacy;
Student Participation
in Physical
Education**Abstract**

This study aims to analyze the relationship between physical literacy and student participation in physical education learning at MTs Daarul Fikri Uluum Binong. A quantitative approach with a correlational research design was used. The population consisted of 166 students, from which a sample of 118 students was selected using the Simple Random Sampling technique, with sample size determined through the Slovin formula. Data were collected using a Likert-scale questionnaire consisting of 21 statements measuring physical literacy and 19 statements measuring student participation. The data were analyzed using descriptive statistics, the Kolmogorov-Smirnov normality test, and the Pearson Product Moment correlation test, processed with IBM SPSS Statistics version 27. The results show that both physical literacy and student participation fall into the Very Good category. The Pearson correlation test revealed a strong and statistically significant positive relationship between physical literacy and student participation ($r = 0.790$; $p = 0.000$; $p < 0.05$). These findings indicate that the higher students' physical literacy, the greater their participation in physical education learning. Therefore, physical education teachers should give greater attention to developing students' physical literacy as an effort to increase student engagement in the learning process.

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INTRODUCTION

Student participation in physical education learning is an important indicator of learning success because it reflects students' behavioral, cognitive, and affective involvement during learning activities (Văn Hoa et al., 2021). High participation supports a more optimal learning experience and students' physical, social, and emotional development. However, student involvement is still influenced by factors such as motivation, perception of competence, learning environment, and teacher support (Guo et al., 2023), showing the need for further study on factors that can increase participation.

One factor suspected to play a role is physical literacy. Whitehead (2010) states that physical literacy is a combination of motivation, confidence, physical competence, knowledge, and understanding that encourages individuals to participate in physical activities throughout life. Caldwell et al., (2020) adds that it is an important foundation for building an active lifestyle and supporting well-being, while Cairney et al., (2019) explains that physical literacy connects movement competence, motivation, and physical activity, encouraging greater involvement. Thus, students with good physical literacy tend to be more ready to participate in physical education learning. This relationship can be seen through its components: motivation drives active participation, confidence supports students in movement activities, physical competence helps them complete learning tasks, and knowledge and understanding raise awareness of the importance of participation. Cornish et al., (2020) explains that the integration of these components increases student engagement, which in turn encourages participation.

Several studies support this role. Melby et al., (2023) found physical literacy positively related to adolescents' physical activity but did not examine participation in physical education learning. Britton et al., (2023) reported that physical literacy improves movement competence and confidence but focused on motor skills. Castillo-Retamal et al., (2024) showed physical literacy is related to students' motivation and engagement in physical education learning, reinforced by Guan et al., (2023), who found perception of physical competence and enjoyment of learning to be important engagement factors. Clark et al., (2022) found physical literacy predicts physical activity levels and sedentary behavior in adolescents, though not directly linked to participation in physical education learning.

Although previous studies show physical literacy contributes to physical activity, movement competence, motivation, and engagement, its direct relationship with student participation in physical education learning remains understudied. Therefore, this study aims to analyze the relationship between physical literacy and student participation in physical education learning among students of MTs Daarul Fikril Uluum Binong. This study offers novelty by focusing on student participation during the learning process itself, rather than only physical activity or movement competence as in previous studies. The results are expected to strengthen empirical evidence on physical literacy as a predictor of student participation and serve as a basis for teachers in designing learning that increases students' motivation, confidence, physical competence, knowledge, and involvement.

METHODS

This study uses a quantitative approach with a correlational research design to analyze the relationship between physical literacy and student participation in physical education learning at MTs Daarul Fikril Uluum Binong. According to Sugiono (2023), quantitative research is based on the philosophy of positivism and is used to study certain populations or samples through research instruments and statistical analysis to test predetermined hypotheses, while correlational design aims to determine whether a relationship exists and its degree of closeness between variables without giving treatment. This approach and design were chosen as they suit the study's purpose of analyzing the relationship between physical literacy and student participation based on empirical data.

The population consisted of 166 students of MTs Daarul Fikril Uluum Binong. Using the Slovin formula, a sample of 118 respondents was obtained through Simple Random Sampling, a technique that gives every population member an equal chance of being selected (Sugiono, 2023), chosen to objectively represent population characteristics and minimize bias.

The research instrument was a closed questionnaire using a five-point Likert scale (Strongly Disagree to Strongly Agree). Physical literacy was measured using an instrument adapted from Bahar et al., (2023) with 21 statements, while student participation was measured using an instrument adapted from Văn Hoa et al., (2021) with 19 statements. Both instruments were tested for validity and reliability: all statements were valid (calculated $r >$ table r of 0.1809), and Cronbach's Alpha showed a reliability value of 0.851 for both instruments.

Data were collected through observation, documentation, and questionnaires—observation to capture learning implementation and student involvement, documentation to support the research, and questionnaires as the main instrument. Respondents were informed of the research purpose, data confidentiality, and their right to voluntary participation (informed consent), and the study obtained an implementation permit from the school prior to data collection.

Data were analyzed using IBM SPSS Statistics version 27, beginning with descriptive statistics (mean, minimum, maximum, standard deviation), followed by normality (Kolmogorov–Smirnov) and linearity tests to confirm parametric assumptions. Hypothesis testing then used the Pearson Product Moment correlation test to determine the direction and strength of the relationship, with significance set at $p < 0.05$.

RESULTS AND DISCUSSION

This study involved 118 students of MTs Daarul Fikril Uluum Binong to analyze the relationship between physical literacy and student participation in physical education learning. The research data was obtained through the distribution of questionnaires using the Likert scale and analyzed using IBM SPSS Statistics version 27. The analysis began with descriptive statistics to provide an overview of the physical literacy condition and student participation before testing the relationship between variables. The results of the descriptive analysis showed that the level of physical literacy of students was in the very good category, which indicates that most of the respondents had good motivation, confidence, physical competence, knowledge, and understanding of physical activities.

The mean physical literacy score was 92.97, with a minimum score of 74.00, a maximum score of 105.00, and a standard deviation of 7.90. The relatively small standard deviation value shows that the spread of scores between respondents tends to be homogeneous, so that the level of physical literacy of students does not have too large a difference. Based on the predetermined category interval, the average score is included in the very good category. A summary of the descriptive statistical results of the physical literacy variable is presented in Table 1.

Table 1. Descriptive Statistics of Physical Literacy

Components Statistics	Results
N	118
Mean	92.97
Medium	93.00
Mode	105.00
Standard Deviation	7.90
Minimum Score	74.00
Maximum Value	105.00

The category of students' physical literacy is determined based on the score interval compiled from the theoretical score range of the instrument and grouped into four categories, namely excellent, good, adequate, and poor. Based on the results of the categorization, the average physical literacy score of 92.97 is included in the very good category. These results indicate that the majority of students have a high level of physical literacy, which is reflected

in motivation, confidence, physical competence, knowledge, and a good understanding of physical activities. This condition shows that students have the potential to actively participate in physical education learning. The distribution of students' physical literacy categories is presented in **Figure 1**.

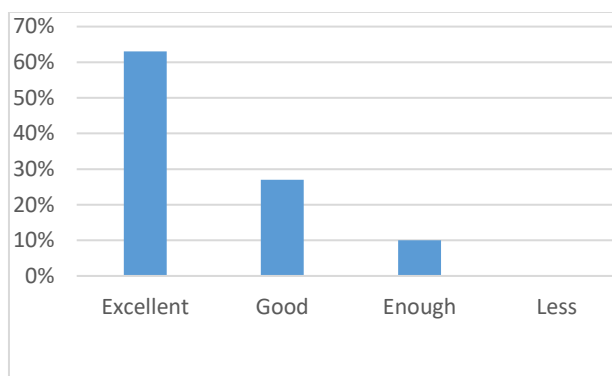


Figure 1. Distribution of Physical Literacy Categories Among Students

The results of the descriptive analysis showed that the level of student participation in physical education learning was in the very good category. The average score of student participation was 81.83, with a minimum score of 65.00, a maximum score of 95.00, and a standard deviation of 7.41. The relatively small standard deviation values indicate that the spread of student participation scores among respondents tends to be homogeneous. Based on the predetermined category interval, the average score is included in the very good category. These results indicate that most students show high engagement during physical education learning. A summary of the descriptive statistics of the student participation variables is presented in **Table 2**.

Table 2. Descriptive Statistics of Student Participation

Components Statistics	Results
N	118
Mean	81.83
Medium	82.50
Mode	85.00
Standard Deviation	7.41
Minimum Score	65.00
Maximum Value	95.00

Based on the category interval that has been set, the average student participation score of 81.83 is included in the very good category. These results show that most students have a high level of involvement in participating in physical education learning, both in terms of attendance, activeness, and involvement during the learning process. The distribution of student participation categories is presented in **Figure 2**.

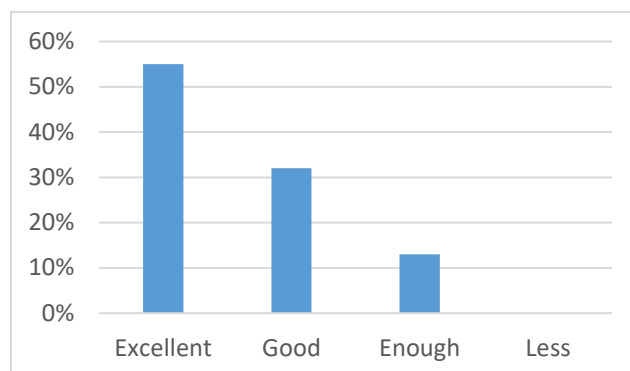


Figure 2. Distribution of Student Participation Categories

Before hypothesis testing, the data were first tested for normality using the Kolmogorov–Smirnov test to ensure that the data met the assumptions of parametric analysis. The results of the normality test showed a significance value of 0.067 ($p > 0.05$), so that the data was declared to be normally distributed and qualified for Pearson Product Moment correlation analysis. The results of the normality test are presented in **Table 3**.

Table 3. Kolmogorov-Smirnov Test One Sample

Variabel	Sig	Remarks
Physical Literacy with Student Participation	0.067	Normal

Once the data met the assumption of normality, hypothesis testing was performed using the Pearson Product Moment correlation test to analyze the relationship between physical literacy and student participation in physical education learning. The results of the analysis showed a correlation coefficient of $r = 0.790$ with a significance value of 0.000 ($p < 0.05$). These findings suggest that there is a strong and significant positive relationship between physical literacy and student participation. The results of the correlation test are presented in **Table 4**.

Table 4. Pearson Correlation Test Results

Variabel	Correlation Coefficient (r)	Sig.	Interpretasi
Physical Literacy with Student Participation	0.790	0.000	Strong Relationships

The results of the Pearson Product Moment correlation test in Table 4 show a correlation coefficient value of $r = 0.790$ with a significance value of 0.000 ($p < 0.05$). These results show that there is a strong and significant positive relationship between physical literacy and student participation in physical education learning, so the research hypothesis is accepted. Thus, it can be concluded that the higher the level of physical literacy that students have, the higher their level of participation in physical education learning. These findings show that physical literacy is one of the factors that plays a role in encouraging student involvement during the learning process.

The findings of this study are in line with the concept of *physical literacy* put forward by Whitehead (2010), Which explains that *physical literacy* includes motivation, confidence, physical competence, knowledge, and understanding that encourage individuals to actively engage in physical activity throughout life. This view is reinforced by Cairney et al., (2019) which states that the integration of *physical literacy components* shapes the readiness of individuals to participate in various movement activities. Therefore, students who have a good level of

physical literacy tend to have higher motivation, confidence, and physical competence so that they are more actively participating in physical education learning.

The results of this study are also consistent with previous studies. Melby et al., (2023) found that *physical literacy* was positively associated with adolescent physical activity, although the study had not examined student participation during the physical education learning process. (Britton et al., 2023) reported that *physical literacy* contributes to improving students' movement competence and confidence, but still focuses on motor skills. Furthermore, Castillo-Retamal et al., (2024) It shows that *physical literacy* is related to increasing students' motivation and *engagement* in physical education learning. The findings are reinforced by Guan et al., (2023) which explains that the perception of physical competence and enjoyment of learning are important factors that increase student engagement. Research Chen et al., (2019) It also shows that knowledge of physical activity and positive attitudes towards physical education contribute to student involvement in the learning process. Meanwhile, Öztürk et al., (2023) It found that students with higher levels of *physical literacy* tended to have better levels of physical activity. These results are also supported by Clark et al., (2022) which shows that *physical literacy* is able to predict active behavior in adolescents.

However, most previous research has more associated *physical literacy* with physical activity, movement competence, motivation, or *general student engagement*. This research contributes by showing that *physical literacy* also has a strong relationship with student participation during the learning process of physical education in the context of Madrasah Tsanawiyah. This finding expands the empirical evidence regarding the application of the concept of *physical literacy* in the madrasah education environment which is still relatively limited to be studied. Practically, the results of this study indicate that Physical Education Sports and Health teachers need to develop learning that is not only oriented to the mastery of movement skills, but also able to increase students' motivation, confidence, physical competence, knowledge, and understanding of physical activities so that their participation in learning can increase optimally

CONCLUSION

This study concludes that there is a strong, significant positive relationship between physical literacy and student participation in physical education learning at MTs Daarul Fikril Uluum Binong: the higher students' physical literacy, the higher their participation. These findings reinforce empirical evidence that physical literacy is a key factor supporting student engagement during physical education learning, contributing to the development of physical literacy studies, particularly in the Tsanawiyah Madrasah context, which remains relatively understudied.

The findings imply that PJOK teachers should give attention to developing physical literacy when designing learning, focusing not only on movement skill mastery but also on strengthening students' motivation, confidence, physical competence, and knowledge of the importance of physical activity. This is expected to encourage more active participation and a more meaningful learning experience. As this study was limited to one school using a correlational quantitative approach, further research with a wider sample and additional influencing factors is recommended.

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