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Bridging the Gap in Physical Literacy: Differences in Competency, Motivation, and Knowledge Between Grades 5 and 6

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Abstract
This study investigates the differences in physical literacy between 5th and 6th grade students at SD Negeri 1 Sadeng. The research focuses on students' ability to exercise, their knowledge about participating in physical activity, and their motivation to do so. Physical literacy, which includes knowledge, skills, encouragement, and understanding, is crucial for building healthy lifestyles. The study involved 40 students from grades 5 and 6 who were selected through purposive sampling techniques. The results showed that grade 5 students were mostly in the Beginner category in physical literacy, while grade 6 students were already in the Developmental category. The study also found significant differences in physical literacy, motivation, and knowledge between the two age groups. Although both grades showed progress, grade 6 students showed greater progress in these areas. The study underscores the importance of teachers providing additional support to grade 5 students to improve their physical literacy.

Keywords: physical literacy; elementary school; physical competence; motivation; physical education

1. Introduction

In the field of physical education, physical literacy is a rapidly evolving concept and is recognized as an important component in improving the quality of life through participation in physical activity throughout life. Physical literacy encompasses things such as knowledge, physical skills, motivation, and an understanding of physical activity that are important to build individuals who can implement a healthy lifestyle in a sustainable (Adi et al., 2021; Adi, Soenyoto, Yuwono, et al., 2025; Meilani & Adi, 2025) Although physical education is becoming very important worldwide, the curriculum is still limited in primary schools, especially in Indonesia, leading to a lack of achievement of physical education goals in primary schools (Fathiyati et al., 2022; Permana et al., 2024; Septian & Adi, 2025).

The World Health Organization (WHO) says that one part of a healthy lifestyle that can reduce the risk of heart disease and diabetes is to do more physical activity, but more than 80 percent of adolescents worldwide do not do so (Adi et al., 2024; Adi, Soenyoto, Yuwono, et al., 2025; Jiang et al., 2025). In Indonesia, children spend more time with digital games and learning patterns that are more centered on indoor activities. This is a similar phenomenon. This causes them to exercise less (Adi, Soenyoto, Yuwono, et al., 2025; Permana et al., 2024; Septian & Adi, 2025) Many schools are still lacking in incorporating physical education into their curriculum, even though physical education is essential for developing healthy habits (Arbanisa & Adi, 2025; Fathiyati et al., 2022; Septian & Adi, 2025).

In Indonesia, especially in primary education, the measurement of students' physical literacy is still limited to simple teacher assessments, without tools that can provide a more accurate and comprehensive picture of their progress (Adi, Soenyoto, Yuwono, et al., 2025; Fathiyati et al., 2022; Soenyoto et al., 2025). Therefore, it is very important to create tools that not only measure physical competence but also other aspects, such as motivation and knowledge, which are essential to encourage students to actively participate in physical activity (Adi, Soenyoto, Yuwono, et al., 2025; Aliriad, S, et al., 2024; Melissa & Adi, 2025; Permana et al., 2024). In Indonesia, research on physical literacy needs to be improved, especially to address the problem of low student involvement in physical activity. Further research on the relationship between physical competence, knowledge, and desire to participate in physical activity and children's long-term engagement is essential (Adi et al., 2024; Melissa & Adi, 2025; S et al., 2020). This is because it has been proven that students who are more involved in physical activity tend to have better motor competence and are more motivated to participate in physical activity in the long term.

In addition, although more research has focused on Physical Literacy in students in Indonesia, there is still little research that does. This is important because factors such as geographical, cultural, and socioeconomic location can affect children's participation rates in physical activity (Meilani & Adi, 2025; Permana et al., 2024; Septian & Adi, 2025). More in-depth research on the influence of these factors on physical literacy in Indonesia is essential to create educational programs that are more appropriate to local circumstances (Adi, Soenyoto, Yuwono, et al., 2025; Fathiyati et al., 2022; Yuwono et al., 2024). In addition, it is very important to create a physical literacy assessment tool that is in accordance with the characteristics of Indonesian students. It is hoped that this tool can be used by physical education teachers to systematically and objectively assess students' abilities, their motivations, and their knowledge of physical activity. Previous findings suggest that more precise measurements can help in creating a better physical education curriculum (Adi et al., 2021; Adi, Soenyoto, & Darmawan, 2025; Meilani & Adi, 2025).

Additionally, it is important to emphasize how physical education affects students' desire to participate in physical activity throughout their lives. Studies by Jiang et al., (2025) and Fortnum et al., (2025) found that a strong drive to participate in physical activity is associated with improved physical abilities and health of students in the long run. Therefore, increasing physical literacy at the elementary level can play an important role in building an active and healthy culture among Indonesian children (Adi et al., 2024; Permana et al., 2024; Soenyoto et al., 2024). The aim of this study was to identify differences in students' physical literacy in elementary schools from grades 5 to 6 by focusing on students' physical competence, their knowledge, and their motivation to participate in physical activity. By gaining a better understanding of these differences, this research is expected to help develop a more inclusive physical education curriculum and encourage students to participate more actively in physical activity (Adi, Soenyoto, Yuwono, et al., 2025; Fathiyati et al., 2022; Meilani & Adi, 2025).

In addition, the development of measuring instruments that can measure the physical competence of students in Indonesia, especially at the basic education level. With this measuring tool, it is hoped that physical education teachers can more easily find the special needs of students and design better programs to improve students' physical skills (Fathiyati et al., 2022; Melissa & Adi, 2025; Permana et al., 2024). Therefore, this research is very relevant because Physical Literacy is very important to build a healthy and active lifestyle for children in Indonesia. It is hoped that this study will provide a better understanding of how Physical Literacy affects the health and well-being

of children in Indonesia in the long term and how it forms a more active and healthy generation (Adi et al., 2024; Adi, Soenyoto, Yuwono, et al., 2025; Permana et al., 2024).

2. Method

Research design

This study uses a descriptive quantitative method, which aims to describe the phenomenon by collecting numerical data that can be categorized, sorted, and measured. This method does not look for cause-and-effect relationships, but rather provides an overview of the conditions of certain variables in the population or sample studied, with the aim of revealing existing conditions or situations, as well as providing objective and systematic information without intervention (Ulfa, 2023).

Participants

Researchers took several students at a school in Semarang City, Gunungpati District, with a total sample of 40 students, consisting of 20 students in grade 5 and 20 students in grade 6 from SD Negeri 1 Sadeng. In this study, the sampling technique is purposive sampling, which means that the sample consists of students from grades 5 and 6, as well as who the informants are. This makes it simpler for researchers to decide on criteria and think about the motivations behind this study.

Table 1. Research sample

No	School	Class	Male Students	Female Students	Total Number of Students
1	SD N 1 Sadeng	Grade 5	8	12	20
2		Grade 6	8	12	20

Data Collection Techniques

Data for this study was gathered and obtained through a battery of tests. Physical literacy encompasses a variety of disciplines, including knowledge and comprehension, physical abilities, and motivation and confidence. The Physical Competency Domain Physical Literacy Test for Elementary Schools (TLJSD-DKF) was created by (Fathiyati et al., 2022). Initial interviews and physical literacy tests in the areas of knowledge and comprehension, motivation and self-assurance, and physical skills make up these tools. Consequently, the following rules and guidelines need to be adhered to in order to operate the research instrument.

1. TIAMSA

The TIAMSA exam uses simulated motions and abilities to assess a child's motor ability to participate physically. It is intended that by merging classic games, kids would be able to play actively and become familiar with them. A field, duct tape or chalk, a soccer ball, a caste ball, six cones, twelve tile plates, stationery, a scoresheet, and a stopwatch are the supplies needed for this test.

Procedure for Implementation

After the first slab-throwing movement, Post 2: Walking sideways, Post 3: Catching and tossing a tennis ball to a wall-mounted slab or piece of paper, Post 5: Participants kick the ball toward a

cone (formed like a goal) after running an antelope to the first position and jumping with one foot without touching the line. Below is a snapshot of the TIAMSA test procedure.
Measurement results are recorded in seconds, and points are awarded to those who successfully finish a task.

2. PACER
This test's objective is to assess cardiorespiratory endurance. A meter, a field, a loudspeaker, or recordings of tapes or CDs with the PACER test guide, test forms, and stationery are used in this test.
Procedure for Implementation
Be sure to stand behind the starting line. As soon as the first beep sounds, sprint across the line and get there before the next one. The beeps increase louder every minute, so wait for the next one. The completion of one level is indicated by three beeps. Continue to run as hard as you can. And when you cross the line, leave the arena if you're late.

3. SIT-UP
This test's objective is to determine the abdominal muscles' strength and stamina. A stopwatch, stationery, a test form, and a base or mat, if necessary, are required for this test.
Procedure for Implementation
Officers set up the apparatus for the sit-up exam. The first posture is executed by Testi by placing each hand near to the ear while lying on the floor or mat with both legs folded roughly at a 90-degree angle. To stop them from being raised, the officer or witness may grasp both ankles. The officer might tell the cue to "be ready" and "start" before beginning. The participant can switch to a sitting position as the cue begins, touching both thighs with both elbows, and then return to the starting position. For thirty seconds, this motion is repeated.

4. Questionnaire
Students may experience feelings of inadequacy, insecurity, or lack of motivation after physical skills test exercises. Questionnaires on knowledge and understanding, motivation and confidence, and both were used to test the domains of knowledge and comprehension as well as motivation and confidence. You must complete the Google form found at the linked link in order to gather data for this domain.
Process of Implementation
A questionnaire was created by the researchers using Google Forms. An internet-connected mobile phone is set up by the instructor. Students are able to complete the survey on their own. Students are assisted by researchers and educators in completing surveys.

5. Evaluation
From 1 to 4, every category is classified as either very improper, non-appropriate, acceptable, or highly appropriate. The answer number and the number of questions in each domain are added together to determine the students' responses. Once the researcher has the amount of responses from each student, they may use the following formula to determine how to interpret the score:

Formula for determining the results of questionnaire scores

$$\text{Results of the Number of Students (1-40)} \times 100 \;:\; \text{Highest Score (40)} = \text{Value Results (0-100)}$$

The final value can be matched to the value that has been interpreted as follows:

Table 2. Category questionnaire

Beginning	Progressing	Achiving	Excelling
0-25	26-50	51-75	76-100

6. Table of Norms

Following each exam, conclusions will be drawn and test results evaluated in the context of physical capability. Four categories make up the categorization that the TLJSD-DKF tool has created. The following is an interpretation of the four categories:

a. Beginning, Children at this stage are thought to need a lot of help and encouragement since they are thought to have limits when it comes to utilizing physical literacy test devices.
b. Progressing, At this stage, it is believed that kids advance more quickly than their classmates in terms of enhancing and using their health.
c. Achiving, This level makes the assumption that kids have improved their health and used it to attain physical literacy. They may keep moving forward on their road toward physical literacy with encouragement and assistance.
d. Excelling, At this point, it is believed that the kid has benefited from the process of enhancing and making use of important health resources.

To be able to calculate the total physical competency domain's final value. Therefore, the total score must be determined, and it is as follows:

Physical literacy assessment calculation formula

Tiamsa (10 Points) + Pacer (10 Points) + Sit-Up (10 Points) = Physical Competency Assessment (Range 0-30 poin).

After calculating how many points were earned by totaling all of the test item's scores. The end point may thus be compared to the end point that has been categorized as follows

Table 3. Physical literacy assessment categorization interpretation

Age	Beginning	Progressing	Achiving	Excelling
Woman				
Eight Years	<13.2	13.2-18.0	18.1-20.3	>20.3
Nine Years	<13.7	13.7-18.6	18.7-20.9	>20.9
Ten Years	<14.1	14.1-19.1	19.2-21.6	>21.6
Eleven Years	<14.5	14.5-19.8	19.9-22.3	>22.3
Twelve Years	<15.2	15.2-20.7	20.7-23.3	>23.3
Man				
Eight Years	<13.4	13.4-19.4	19.5-22.0	>22.0
Nine Years	<13.7	13.7-19.9	20.0-22.5	>22.5
Ten Years	<14.1	14.1-20.3	20.3-23.0	>23.0
Eleven Years	<14.3	14.3-20.8	20.9-23.6	>23.6
Twelve Years	<14.9	14.9-21.6	21.7-24.5	>24.5

Data Analysis Techniques

This research made use of quantitative data processing derived from field data. Microsoft Excel, a computer program, is used to calculate the test series results in order to determine the categorization results. Following the completion of the Levene homogeneity test, the data will be tested using the independent sample homogeneity test and the Shapiro-Wilk normality test. The data will be examined differently from the independent sample T test and the Mann Whitney test, which are used to establish whether or not the data is normally distributed, if the lowland and highland samples satisfy the conditions. The Statistical Package for Social Sciences (SPSS) version 30 was used to analyze the data at the significance level of $\alpha = 0.05$.

3. Result

Results of the physical literacy assessment (TIAMSA, PACER, SIT-UP)

Table 4 provides information based on the findings of the Physical Literacy Assessment of SD Negeri 1 Sadeng's fifth and sixth grade pupils.

Table 4. Findings from SD Negeri 1 Sadeng's physical literacy assessment for students in grades 5 and 6

Class	Gender	Average Score	Classification
Grade 5	Man	14	Beginning
	Woman	14	Beginning
Grade 6	Man	18	Progressing
	Woman	16	Progressing

Based on the results of the physical literacy assessment, it shows that most of the students in grade 5 of SD Negeri 1 Sadeng are still in the *beginning* category, which means they need further help in terms of physical literacy. Meanwhile, students in grade 6 have reached the *progressing stage*, showing that there are differences in physical literacy development among this age group.

Motivation & self-confidence results and knowledge & understanding

The following information may be gathered from the knowledge and comprehension of SD Negeri 1 Sadeng's grade 5 and grade 6 pupils, as well as the results of the motivation and confidence questionnaire test:

Table 5. Findings from the motivation and confidence survey and the knowledge and understanding of SD Negeri 1 Sadeng's grade 5 and grade 6 students

Class	Questionnaire	Average Score	Classification
Grade 5	Motivation and Confidence	23	Beginning
	Knowledge and understanding	29	Progressing
Grade 6	Motivation and Confidence	24	Beginning
	Knowledge and understanding	33	Progressing

Based on the results of the questionnaire shows that most students in grade 5 and grade 6 are still in the Beginning category in terms of motivation and confidence, suggesting that they need more support to increase their motivation and confidence. On the other hand, students in both classes

are in the Progressing category in terms of knowledge and understanding, which indicates that they have made significant progress, although there is still room for development.

Normality Test

The Shapiro-Wilk normality test was used in this investigation, with a significance threshold of α = 0.05. When the significance value (P) is less than 0.05, it means that the data is not normally distributed; when it is more than 0.05, it means that the data is normally distributed.

Table 6. Findings from the physical literacy assessment normality test for students in grades 5 and 6 at SD Negeri 1 Sadeng

Class	Statistic	df	Sig	Information
Grade 5	929	20	0,151	Sig > α 0,05 = Normal
Grade 6	948	20	0,340	Sig > α 0,05 = Normal

Both the 5th and 6th grade data groups showed significance values greater than 0.05, indicating a normal distribution, according to the results of the Shapiro-Wilk normality test.

Table 7. Findings from SD Negeri 1 Sadeng's grade 5 and grade 6 students' normality test of motivation and confidence questionnaire

Class	Statistic	df	Sig	Information
Grade 5	927	20	0,132	Sig > α 0,05 = Normal
Grade 6	939	20	0,230	Sig > α 0,05 = Normal

Table 8. Findings from the knowledge and comprehension normality test for students in grades 5 and 6 at SD Negeri 1 Sadeng

Class	Statistic	df	Sig	Information
Grade 5	917	20	0,088	Sig > α 0,05 = Normal
Grade 6	940	20	0,238	Sig > α 0,05 = Normal

Both groups of knowledge and comprehension data had a normal distribution, according to the results of the Shapiro-Wilk normality test.

Homogeneity Test

In this study, the levene statistic homogeneity test was used. A significance value (P) below 0.05 indicates that the data variance is not homogeneous, while a significance value (P) above 0.05 indicates that the data variance is homogeneous.

Table 9. Findings from SD Negeri 1 Sadeng's grade 5 and grade 6 students' homogeneity test of physical literacy, motivation and confidence, and knowledge and understanding

Assessment	Levene Statistic	df1	df2	Sig	Information
Physical Literacy Assessment	2,301	1	38	0,138	Sig > α 0,05= homogen
Motivation and Confidence	0,006	1	38	0,938	Sig > α 0,05= homogen

Because the three variables had a significance value of more than 0.05, the results showed that each of the variables tested showed homogeneous results with the same variance between grade 5 and grade 6.

Hypothesis Test

If the data in this research were regularly distributed, hypothesis testing were conducted using a T-free sample test; if the data were abnormally distributed, a nonparametric alternative test called the Mann Whitney test was utilized. A significance threshold of $\alpha = 0.05$ was used to all tests.

Independent Samples T Test

The conclusion is that there is a significant difference if the significance value (2-tailed) is less than 0.05. On the other hand, the conclusion that there is no significant difference is made if the significance value (2-tailed) is higher than 0.05.

Table 10. Findings from the independent samples t test evaluation of physical literacy for students in grades 5 and 6 at SD Negeri 1 Sadeng

					95% Confidence Interval of the Difference		
T	**df**	**Sig. (2-t)**	**Mean Difference**	**Std. Error Difference**	**Lower**	**Upper**	**Information**
-3,305	38	0,002	-2,850	0,862	-4,596	-1,104	Sig. t < α 0,05 = There is a difference (0,002 > 0,05)
-3,305	33,577	0,002	-2,850	0,862	-4,603	-1,097	Sig. t < α 0,05 = There is a difference (0,002 > 0,05)

The results of the independent samples T Test showed that students in grades 5 and 6 of SD Negeri 1 Sadeng showed significant differences in physical literacy assessments. The difference between these two groups is quite significant and not coincidental, according to significance values lower than 0.05 (or 0.002). Grade 6 had better physical literacy scores compared to grade 5, as shown by the decrease in the mean difference.

Table 11. Findings from the independent samples t test on the confidence and motivation of students in grades 5 and 6 at SD Negeri 1 Sadeng

					95% Confidence Interval of the Difference		
T	**df**	**Sig. (2-t)**	**Mean Difference**	**Std. Error Difference**	**Lower**	**Upper**	**Information**
-2,206	38	0,034	-.709	0,321	-1,359	-,058	Sig. t < α 0,05 = There is a difference (0,034 > 0,05)

-2,206	37,094	0,034	-,709	0,321	-1,360	-,058	Sig. t < α 0,05 = There is a difference (0,034 > 0,05)

A 2-tailed significance value is 0.034, less than 0.05. This shows a significant difference in the motivation and confidence of learners in grade 5 and grade 6. These results show that there is a significant difference in the motivation and confidence of students in the two classes.

Table 12. Findings from the independent samples t test on knowledge and understanding for students in grades 5 and 6 at SD Negeri 1 Sadeng

					95% Confidence Interval of the Difference		
T	**df**	**Sig. (2-t)**	**Mean Difference**	**Std. Error Difference**	**Lower**	**Upper**	**Information**
-2,605	38	0,013	-3,400	1,305	-6,043	-,757	Sig. t < α 0,05 = There is a difference (0,013 > 0,05)
-2,605	37,990	0,013	-3,400	1,305	-6,043	-,757	Sig. t < α 0,05 = There is a difference (0,013 > 0,05)

A significance value is 0.013, less than 0.05. This shows that 5th and 6th grade students have different knowledge and understanding. A decrease in significant mean differences indicates that there is a significant difference in their knowledge and understanding.

4. Discussion

To become a healthy and skilled person physically, socially, and cognitively, physical education is essential. Physical literacy is an increasingly popular concept in various countries and refers to the ability to understand, appreciate, and take responsibility for physical activities throughout life (G Kukuh Ikhsanto et al., 2023; S, Aliriad, Arbanisa, & Winoto, 2023; S, Aliriad, Arbanisa, Winoto, et al., 2023). Thus, physical literacy helps people maintain their confidence and acquire additional knowledge in addition to physical skills (Kasua et al., 2024; S et al., 2021). The phenomenon of declining participation of children and adolescents in physical activity, which is highly noticed around the world, can provide an idea of the background to the importance of this topic. According to many studies, lack of physical activity is associated with an increased risk of type 2 diabetes and obesity. Therefore, physical literacy can help improve physical participation as it provides a better understanding of the benefits of physical activity, as well as motivation and skills to actively participate in sports and other physical activities (Aliriad et al., 2020; G Kukuh Ikhsanto et al., 2023). Not only physical health, but children's gross and fine motor development is influenced by physical literacy in physical education. By acquiring physical literacy, children will be better prepared to face physical challenges throughout their lives, which will impact academic

achievement, mental health, and overall quality of life. (Adi & Soenyoto, n.d.; Nurdiyan Haris et al., 2025).

In physical education, physical literacy is considered a concept that involves motivation, self-confidence, physical competence, knowledge, and understanding to participate in physical activity throughout life. Physical literacy is defined as a person's ability to "read" his body and his physical environment, as well as an effective response to a variety of physical activities, with the aim of supporting lifelong participation in physical activity (Adi.S et al., 2025; Aziz & Nur, 2024). The results of the study (Nurdiyan Haris et al., 2025) show that physical literacy and physical activity improve physical fitness, mental health, and basic motor skills. Arief et al., (2024) conducted additional research that emphasizes the importance of physical literacy in early childhood can improve gross and fine motor skills as well as children's physical fitness. Similar results were also found in a study at a Vocational High School (SMK) in Surabaya: physical literacy correlates with students' motivation and physical abilities, although many students still need further support to keep exercising (Agusta, 2024; Hakim & Adi, 2025).

Many studies have shown that physical literacy is excellent for overall health and physical activity. However, there are some difficulties in implementing it. Much research is still limited to the theoretical and measurement aspects of formal education. On the other hand, not much research has been done on the development of physical literacy outside of school, especially in the community and in daily life. For example, research conducted by (Arief et al., 2024; Jiddan & Adi, 2025) found that community participation in sports is low, even though physical literacy has been implemented in some schools. This research shows that national sports policies must consider physical literacy. In addition, a study by (Kasua et al., 2024; Adi, 2025) found that physical education teachers consider physical literacy better than classroom teachers, suggesting that physical education teachers consider physical literacy better than classroom teachers. This suggests that educators should be trained and further trained to understand the concept of physical literacy in a broader context than just theory. The purpose of this research is to overcome differences by emphasizing the importance of physical literacy in physical education at the elementary level and the role of teachers in implementing it. By increasing teachers' understanding of physical literacy, it is hoped that student participation in lifelong beneficial physical activities will increase.

The results of the research conducted on students in grades 5 and 6 of SD Negeri 1 Sadeng show that physical literacy, motivation, confidence, and knowledge and understanding are very important. The Physical Literacy Assessment shows that grade 5 students, both male and female, receive an average score of 14 and fall into the Beginning category, indicating that they are still in the early stages of physical learning and need further help to continue to grow. Grade 6 students, on the other hand, received an average score of 18 for boys and 16 for girls, and fell into the Progressin category. This suggests that, in terms of physical literacy development, there are clear differences between the two age groups. On motivation and confidence, most students in grades five and six were in the early category, with an average score of 23 for fifth grade and 24 for sixth grade, indicating that students still have low motivation and confidence and need additional support to improve those aspects. However, in knowledge and understanding, most of the students in both classes are in the progressing category.

The results of the Shapiro-Wilk normality test showed that the data for all the variables tested Knowledge and Comprehension, Physical Literacy Evaluation, Motivation and Confidence had a

normal distribution with significance values greater than 0.05. This suggests that the data used in the study meet the assumption of normality, which is an important reason to continue the analysis. Furthermore, the results of the homogeneity test with Levene Statistic showed that all variables Knowledge and Comprehension, Physical Literacy Assessment, and Motivation and Confidence had the same variance. Since the significance value is greater than 0.05, the variability of the data from grade 5 to grade 6 did not differ significantly, which allowed for further comparison. For the hypothesis test, the results of the independent samples T Test showed that there were significant differences between the 5th and 6th grade groups in the evaluation of physical literacy, motivation and confidence, knowledge, and understanding. The significance value of the three tests was less than 0.05, which suggests that there was a significant difference between the two groups. Grade 6 received higher scores in physical literacy evaluations compared to grade 5. Overall, the results of this study show that although both classes show progress, there are still significant differences in some aspects; 6th graders show greater progress in physical literacy, motivation, and confidence, which shows how important additional support is needed for 5th graders

According to the results of my research, most students in grade 5 are in the Beginning category in physical literacy, while students in grade 6 are already in the Progressing category. At SDN 1 Karangsambung, a similar study showed that students had a higher level of physical literacy in the Good and Very Good categories. However, there is a small difference between men and women in terms of the frequency of their physical activity (Aziz & Nur, 2024) Nonetheless, both emphasize how important it is for students to acquire physical literacy as part of physical education in school, as this can affect students' motor abilities. In a study conducted in East Java by G Kukuh Ikhsanto et al., (2023), it was found that there is a positive correlation between physical literacy and physical fitness of students. The results of my research also show a significant relationship between students' physical literacy development and their physical fitness, which suggests that physical literacy is essential for improving students' fitness and motor skills (G Kukuh Ikhsanto et al., 2023; Adi S et al., 2023). Physical literacy includes physical competence, motivation, self-confidence, and increased physical activity and fitness of students, according to the work of Kusuma & Riyadi, (2024). This is in line with the results of my research, which showed that students in both classes still had low motivation and confidence, and they needed more support to improve those aspects.

Emphasizing physical literacy as an integration of physical competence, motivation, and understanding, physical education teachers should emphasize physical literacy-based learning, which focuses on motor skills as well as aspects such as confidence, motivation, and knowledge. It is essential to encourage students to participate in physical activity outside of school at least three times a week for 15–30 minutes, given that most students only participate in PJOK (Edwards et al., 2020; S, Arbanisa, & Winoto, 2023). Sports extracurriculars, community gymnastics, or other activities can be part of this program. This strategy is in line with the recommendations of the WHO globally, as well as the results of Guthold et al., (2020), which show that more than 80% of adolescents worldwide do not engage in standard physical activity on a daily basis. The importance of motivation and confidence scores suggests that an educational approach that encourages students to actively participate is important. Physical literacy media (Melifis), which consists of posters, pamphlets, and information boards, is one of the innovative types of learning media that teachers can use. It has been shown to be effective in increasing students' understanding and interest in lessons (Rosiana et al., 2023; S, Aliriad, Wira Yudha Kusuma, Arbanisa, et al., 2023) Physical literacy needs to be strengthened at home and at school. Parents are expected to set an

example by getting their children used to exercise, such as light exercise at home or elsewhere. Cooperation between families and schools is very important with the aim of improving early childhood physical literacy (Majumi Nur & Aprilo, 2021; S, Aliriad, Nova, Firmansyah, et al., 2023).

The following components should be covered in discussion: How do your results relate to the original question or objectives outlined in the introduction section (what)? Do you provide interpretation scientifically for each of your results or findings presented (why)? Are your results consistent with what other investigators have reported (what else)? Or are there any differences? The discussion material mainly explores whether the results obtained are in accordance with the hypothesis or not, and present the arguments.

5. Conclusion and Recommendation

The study's findings on SD Negeri 1 Sadeng children in grades 5 and 6 revealed notable variations in physical literacy, knowledge and comprehension, motivation, and confidence. In terms of physical literacy, grade 5 children are mostly in the "Beginning" category, while grade 6 students are already in the "Progressing" category, indicating more advancement in older age groups. The same is true for confidence and motivation, where both groups still need assistance to advance. Students in grade 6 also demonstrate more growth in the areas of knowledge and comprehension. The data utilized in the research exhibited a normal distribution, according to the normality test findings. Consequently, more analysis might be carried out. Additionally, the homogeneity test revealed that the data variability in both classes was same, indicating the validity of the comparison. There were notable variations between the fifth and sixth grades in every assessed characteristic, including knowledge and comprehension, motivation and confidence, and physical literacy. This is supported by the findings of the independent samples hypothesis test (T Test). The study's overall findings highlight the importance of physical literacy in elementary school physical education as well as the need for more assistance for kids to increase their own motivation and self-confidence, particularly for those who are still developing. Furthermore, the study's findings indicate that although sixth-grade kids achieve better outcomes, there is still opportunity for improvement, particularly in the areas of motivation and physical literacy. Good physical literacy is supposed to encourage students to engage in physical exercise throughout their lives and aid in their academic, mental, and physical development.
Given the respondents' poor comprehension of teaching and demonstrations and the current paucity of data and reference materials for physical literacy comparisons, it is anticipated that further study on physical literacy in physical education will be conducted.

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Hopefully the findings of this study can make a positive contribution to the development of physical education at the elementary school level. Finally, the author hopes that the findings of this research can make a scientific and practical contribution to the development of physical education and the improvement of physical literacy at the elementary school level. Thus, the results can improve the quality of education in elementary schools such as SD Negeri 1 Sadeng.

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