

# Physical Education and Sports Learning in Elementary Schools: Peer Teaching Model Increases Students' Self-Confidence and Responsibility

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**Abstract.** The loss of self-confidence and responsibility in students can be caused by various factors, both internal and external, such as negative experiences, lack of positive support from people around them, and social comparisons between friends. One way that can be used to implement effective learning strategies is to ensure that teachers involve students actively, creatively, and enjoyably so that they feel more motivated to learn. One of the obstacles faced by teachers when implementing physical education is that students do not feel responsible for what they learn towards the learning objectives that are achieved and the use of appropriate learning models. Therefore, to support students' self-confidence and responsibility, the peer teaching learning model can be used in physical education and sports in schools. The purpose of this study was to determine the level of student development towards self-confidence and responsibility by using the peer teaching model. This study uses a pre-experimental method with a one-group pretest-posttest design with the technique purposive sampling in Class VI SDN 1 Cisurupan Garut. Data were obtained using a questionnaire instrument of student self-confidence and responsibility. Research in this area can provide insight into how schools, teachers, and families can build good character in students, as well as identify factors that influence both characters. Self-confidence and responsibility are two main characters that shape a student's behavior, achievement, and social skills.

**Keywords:** Elementary School; Physical Education; Sports and Health; Peer Teaching; Learning Model; Self-Confidence; Responsibility

## 1. Introduction

Students are state assets as successors in various fields of science, especially education. The implementation of physical education learning has several problems that make students less confident during the learning process, these problems can occur in several factors including schools or the environment, physical education teachers or educators, and students (Purwanto & Susanto, 2020). Therefore, every student should have self-confidence, because it can make someone optimistic and enthusiastic to do everything, and self-confidence can make someone achieve in the field they are studying (Astuti et al., 2023). Physical education has 4 objectives, including social development, the objective of this social development is closely related to the student's ability to adapt to a group or society (Buišić & Đorđić, 2019). Physical education is a series of movement activities that not only involve physical but also psychological factors that overall involve movement learning activities through various games as movement knowledge for students. The lack of response from elementary school students to self-confidence and responsibility in learning Physical Education, Sports and Health (PESH) is caused by various factors including negative experiences in physical activity, lack of social support, less varied teaching approaches, and psychological and emotional factors of students (Brazendale, K., 2016). Increasing attention to social and psychological aspects, as well as the use of inclusive and varied teaching approaches can help improve students' self-confidence and responsibility in learning PESH. Teachers' pedagogical approaches and their instructional strategies can also influence students' attitudes and behaviors towards physical education, sports and health. Research has shown that teacher-student relationships, teaching styles, and classroom environments can influence students' motivation and participation in

physical education, sports and health (Hein et al., 2012). The implementation of physical education learning has several problems that make students less confident during the learning process. These problems can occur in several factors including schools or the environment, physical education teachers or educators, and students (Purwanto & Susanto, 2020). Where there are still many students who do not comply with the rules of physical education learning properly, students are not active in learning with one of the factors being a lack of self-confidence when participating in learning at school, the reason being a lack of skill in practicing physical education learning.

### **1.1. Problem Statement**

Another obstacle that must be faced in implementing physical education learning is the lack of students' sense of responsibility in participating in physical education learning. Self-confidence will make someone feel that they are valuable and have the ability to live life. Low self-confidence results in feelings of inferiority, and they will grow into pessimistic individuals. Many factors influence students' lack of focus in the teaching and learning process at school, especially in Physical Education and Sports subjects, there are students who actively participate in learning, there are also students who reduce the quality of learning because they are not interested or do not like the subject, this is because students' sense of responsibility has not yet been formed properly (Ginanjari & Budiana, 2018). Students who have a poor attitude of responsibility before, during and after participating in physical education learning cause disruption to the teaching and learning process, marked by boredom during the learning process and become a nuisance to other students. Students who have problems with attitudes of responsibility if not given an understanding will cause the teaching and learning process given by the teacher to not be optimal and the predetermined learning plan will not be achieved properly and the learning objectives will not be successful, therefore it is necessary to provide an understanding and coaching of attitudes that are integrated with the learning process carried out by teachers at school. The most appropriate character formation to be implemented in schools has three reasons, namely: First, some students are familiar with the concept of physical education in schools. Second, school age is an effective period for instilling character values. Third, physical education implemented in schools still emphasizes achievement sports (Bahtra & Andika, 2024).

There are many factors that influence this, there are students who actively participate in learning, there are also students who reduce the quality of learning because the students' sense of responsibility has not been formed properly (Hardi & Syahrudin, 2021). Students who have poor attitudes of responsibility before, during and after participating in physical education learning cause disruption to the teaching and learning process. Students who have problems with attitudes of responsibility if not given guidance will cause the learning carried out by the teacher to be less than optimal and the learning that has been determined not to be achieved properly, therefore it is necessary to have attitude guidance that is integrated with the learning carried out by the teacher at school. Therefore, the most appropriate character formation is implemented in schools for three reasons: First, some students are familiar with physical education at school. Second, school age is an effective period for instilling character values. Third, physical education in schools still emphasizes achievement (Bahtra & Andika, 2024). Elementary school age children are the most appropriate age to teach children a sense of responsibility and self-confidence because at this stage, they are in a period of significant social and emotional development. This period is known as a critical phase where children begin to understand the concept of personal responsibility, social relationships, and self-awareness (Trzesniewski et al., 2003). They are also in the process of building a foundation of character that will have a long-term impact on their behavior in adulthood (Fosco et al., 2016). Strategy in the formation of character or behavior of children, where character education is the initial foundation for creating a generation that has noble morals or ethics, the implementation of character education is carried out in the school environment, in the subject of Physical Education where a teacher and the school have an important role in the formation of character and behavior of children (Fathinnaufal & Hidayati, 2020). Effective learning strategies can be done in various ways and one of them is by trying to involve students actively,

creatively and enjoyably, so that students are more enthusiastic in following the learning process. One of them is by using the peer teaching learning model.

Self-confidence and student responsibility are two very important psychological aspects in the learning process. Research on these two aspects is crucial because they play a major role in optimizing learning outcomes, increasing student involvement, and developing social and personal competencies that support student success in various areas of life (Pajares, 2001). Self-confidence and responsibility help students become proactive learners. They do not only wait for instructions from teachers, but also take the initiative in finding learning resources, asking questions, and reflecting on their achievements. In the Growth Mindset theory, students who have confidence in their ability to develop (growth mindset) and a strong sense of responsibility are more likely to seek new challenges, learn from failure, and improve their abilities (Dweck, 2016). Research on self-confidence and responsibility in learning is important because these two aspects contribute directly to student motivation to learn, student engagement, academic achievement, and emotional well-being. By understanding the factors that influence students' self-confidence and responsibility, educators can develop more effective teaching strategies and support students' holistic development, both inside and outside the school environment. The question in this study is whether the self-confidence and responsibility of elementary school students can increase after being given a peer teaching model in Physical Education subjects? so that the question is relevant to the objectives of the research being conducted.

## 1.2. Related Research

In the learning process of Physical Education and Sports at the educational unit level, especially in Elementary Schools, there are several issues that have emerged and developed, including in the teaching and learning process where the teacher is still in control when the learning process is taking place and often uses teacher-centered as the learning model that is carried out and the PESH learning model that is often used in elementary schools tends to be less innovative and is more dominated by traditional methods, such as lectures or repetitive physical exercises. In fact, PESH learning can be more varied and interesting through an approach based on games, exploration, and group cooperation.

Another study on student self-confidence examined the role of public speaking in building elementary school students' self-confidence and provided new insights. The results showed that public speaking activities have an impact on students' self-confidence through structured planning, implementation, and evaluation. These activities include speaking technique exercises, anxiety management, and constructive feedback (Ananda et al., 2024). The impact helps students become more confident, improve critical thinking skills, and encourage better academic achievement through active discussions in class. The program includes planning, implementation, and evaluation supported by learning materials, regular exercises, and adequate facilities. Teachers play an important role in creating a safe environment, providing motivation, positive feedback, and training students in using various public speaking techniques.

Furthermore, the purpose of another study was to analyze the success of implementing the learning model used by teachers. The data analysis techniques used were transcripts, labeling/coding reduction, and triangulation. The results of the study showed an average score of student responsibility of 82.20 or 88% of students who had a good attitude of responsibility after students studied the Rights and Obligations material at home (Zakiah et al., 2022). The results of this measurement indicate that the attitude of responsibility possessed by students is one of the factors in the learning process experienced by students when the brain-based learning model is applied and used. The implication of this study is that it can help teachers in fostering a sense of responsibility as part of the results that have been developed in Citizenship Education learning. However, several things are limitations or limitations encountered in carrying out the research process. The first is the Hawthorn effect, namely that the participants studied understand and realize that they are being studied. The second limitation is that the number of respondents or participants studied is still small, so the results obtained cannot be generalized. The three studies conducted were very limited, therefore it is necessary to be able

to conduct further research. Based on several limitations or limitations in the study, recommendations for further researchers are expected to increase the number of respondents involved in the study.

Another study showed that peer teaching model intervention can improve the short-term non-dominant hand throwing performance of prospective Physical Education teachers and to examine these students' perceptions of the intervention (Beseler et al., 2024). Participants in the video analysis group and verbal group reported that their interventions improved their throwing skills and Qualitative Movement Diagnosis (QMD), respectively. Based on these results, we recommend that physical education teacher education (PETE) programs integrate peer tutoring and video analysis sessions into fundamental movement courses to accelerate students' motor skill acquisition.

Therefore, there are many factors that influence students' self-confidence such as peer factors, parents, schools and physical conditions. This approach is effective in developing these two important characters. Peer teaching, where students teach each other and learn together with peers, encourages them to take an active role, increases self-confidence through success in guiding friends, and fosters a sense of responsibility because they must be accountable for their friends' understanding and learning progress. This model also strengthens social and cooperative skills, thus creating a learning environment that supports holistic character development. In addition, students who teach get reinforcement of their own understanding, which in turn improves academic achievement.

### **1.3. Research Objectives**

Peer teaching is a learning pattern between fellow students, in practice in the field between teachers and students cannot be separated from the process of changing student affection in learning. The constructivist approach in education has received significant attention because of its emphasis on learner-centered instruction, active involvement, and knowledge construction, thus serving as a comprehensive resource for educators, researchers, and policy makers interested in understanding and utilizing the constructivist approach to promote meaningful and transformative learning experiences (Priyamvada, 2018). Thus it will contribute to the lifestyle of the students themselves both now and in the future, which is very important from the use of peer tutor learning methods is to train students to be able to dare to discuss in front of the class, therefore the purpose of this study is to determine the level of student development towards self-confidence and responsibility during physical education and sports learning in schools by implementing peer teaching learning methods. The researcher's identification of the problems found became the focus of the study, namely students have a lack of self-confidence towards their friends so that they neglect the responsibility of students in the PESH learning process in Elementary Schools. So the expected research results are that students dare to be responsible for what is done in the learning process and have self-confidence in every PESH learning material that is treated using the peer teaching learning model.

## **2. Theoretical Framework**

One of the learning approaches that is believed to be able to help increase students' self-confidence and responsibility is the peer teaching learning model, the following is a description of the theory related to the variables contained in this study.



**Figure 1.** Theoretical Framework of Peer Teaching Learning Model

- Peer Teaching Model: Students teach each other and learn together with their peers.
- Students Active Role: In the learning process, students play an active role in teaching the material to their friends.
- Increased Social Interaction: By interacting with each other, students learn to communicate and work together better.
- Increasing Self-Confidence (Self-efficacy): Students feel more confident because they are able to share knowledge and help their friends understand the material.
- Increasing Responsibility: Students become more responsible in learning and teaching because they are relied on by their friends.
- Positive Influence on Self-Confidence and Responsibility: This process as a whole has a positive influence on students' self-confidence and responsibility.
- Positive Character Building: Finally, students develop positive character traits that are useful in everyday life and academics.

The theory developed in this research is (1) Constructivism Theory, according to constructivism theory, students construct knowledge through social interaction and learning activities involving cooperation. Peer teaching is in line with the principle of constructivism, where students actively construct knowledge when teaching their peers (Priyamvada, 2018). Constructivism theory in learning Physical Education, Sports, and Health (PESH) focuses on the concept that knowledge is built through direct experience and social interaction. According to this theory, students do not only receive information passively, but they actively build their own understanding through experience, reflection, and discussion with their friends. Overall, constructivism theory in PESH learning encourages students to learn actively, collaborate with their friends, and reflect on their experiences. This not only strengthens their understanding of the concepts in PESH, but also increases their self-confidence and responsibility, which are important keys in the personal development of students in elementary school. (2) Social Learning Theory (Albert Bandura): This theory emphasizes that students' behavior and attitudes are learned through social interaction, observation, and imitation (Nabavi & Bijandi, 2024). Social Learning Theory according to Albert Bandura emphasizes that learning occurs through observation, imitation, and modeling, where individuals learn behaviors, skills, and values by observing others, especially figures who are considered models. In the context of PESH learning in Elementary Schools, Bandura's social learning theory is very relevant to influence students' self-confidence and responsibility. Through observation, imitation, and social reinforcement, students can learn to develop positive attitudes in physical activities. They will feel more confident when they see the success of others and feel more responsible when they are given important roles in teamwork and are rewarded for their efforts. Thus, this theory can contribute to the development of students' social and emotional aspects inside and outside the classroom.

In peer teaching, students learn from the teaching experience and interact with their peers, which can increase their self-confidence and develop personal responsibility. The peer teaching model is expected to have a significant influence on increasing the self-confidence and responsibility of elementary school students. With an active role in teaching their peers, students will gain valuable experience in leadership, teaching, and learning management which ultimately strengthens their character in the context of formal learning.

### **3. Method**

#### **3.1. Research Design**

The research method in the research conducted is a pre-experimental method with a one-Group Pretest–Posttest design. The selection of the research method and design is based on research reference materials so that researchers get results in accordance with the research objectives. The One-Group Pretest–Posttest design improves the one-group post-test design by adding a pre-test to measure the dependent variable before the treatment is introduced (Christensen et al., 2014). The use of research design only uses one experimental group and no control group. Subjects are directly given a pretest (T1) in the form of a validated self-confidence and responsibility questionnaire, then the subjects are given treatment (X) in the form of a teaching and learning process according to the learning material in grade VI of Elementary School using the peer teaching learning model and the last process is to re-administer the self-confidence and responsibility questionnaire assessment instrument as a posttest (T2). The indicators in the research instrument are self-confidence variables with the following indicators: Not giving up, self-ability, expressing opinions, communication, helping others. Meanwhile, the variables of responsibility are the courage to bear consequences, self-control, carrying out obligations, being persistent, setting a good example.

#### **3.2. Participants**

The characteristics of the participants in this study are one population at State Elementary School 1 Cisurupan, Garut Regency, West Java, the researcher used a research sampling technique using a purposive sampling technique, namely a technique carried out with certain considerations, not based on strata, area, but based on the purpose of the study. The sample selected by the researcher was 15 grade VI Elementary School students, with an average age of 11-12 years. Children aged 12 years are at an important stage in their physical, emotional, and social development. In physical activity, they show increased motor skills, have a greater awareness of their physical abilities, and are strongly influenced by relationships with peers. Due to subjective sample selection, nonprobability sampling has many limitations and, as a result, does not represent the population well. However, it is useful especially in situations where randomization is not possible, such as very large populations. This can be useful in situations where researchers have limited resources, time, and manpower. It can also be useful in situations where the study does not aim to produce results that will allow generalization to the entire population (Etikan et al., 2016).

#### **3.3. Data Collection**

The research was conducted using a psychological self-confidence questionnaire instrument (Lumban et al., 2017). And the responsibility of students (Retnowati, 2019). Both instruments were adopted from the Child Development Project (CDP), which is a character education program that promotes academic and social growth in teachers and students (Chang & Muñoz, 2006). Then the data collected comes from Validity Test, Reliability Test, Normality Test, Homogeneity Test and Hypothesis Test. Instruments with variables of student self-confidence and responsibility are measured using a Likert scale. This is used in the world of education because it can provide an overview of how students view themselves and the extent to which they feel responsible for their learning process.

#### **3.4. Data Analysis**

The research data was processed in accordance with the research method and design that answered the hypothesis of the research objectives conducted. In this study, data were

obtained through the implementation of experiments in the learning process of physical education, sports and health using the peer teaching learning model. The information gathering tool was used by submitting a number of written questions in the form of a self-confidence and responsibility questionnaire to be answered in writing by respondents, which were then processed data from the pretest and posttest results to test the answers to the specified research hypotheses.

### 3.5. Validity and Reliability

The quality of the validity and reliability instruments in this study obtained a correlation coefficient value between variables of  $R_{xy} > 0.96$  because an instrument is said to be valid if it can reveal data from the variables studied accurately. and the reliability degree value of  $r_{11} > 0.83$  this is because the measurement results must remain the same (relatively the same) if the measurement is given to the same subject even though it is carried out by different people, different times, and different places.

## 4. Findings

The data obtained in this study are useful to determine whether or not there is an influence of students' perceptions regarding the peer teaching learning model on students' self-confidence and responsibility in Cisurupan Elementary School, grade VI. First, the researcher presents the research data, after being calculated, the average value, maximum value and minimum value obtained by students in each test conducted are obtained, then continued with instrument analysis, hypothesis testing. The prerequisite test is used so that the basis of the estimation used later can use the t-test model. In the prerequisite test there are two tests, namely normality and homogeneity and hypothesis testing. The Self-Confidence and Responsibility Normality Test in this study is as follows.

**Table 1.** Confidence Normality Test

	Kolmogorov-Smirnova			Shapiro Wilk		
	Statistics	df	Sig.	Statistics	df	Sig.
Self-confidence pretest	.110	15	.200*	.955	15	.612
Posttest self-confidence	.215	15	.061	.926	15	.235

\*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

**Table 2.** Normality Test of Responsibility

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro Wilk		
	Statistics	df	Sig.	Statistics	df	Sig.
Pretest responsibility	.125	15	.200*	.959	15	.682
Posttest responsibility	.196	15	.126	.935	15	.319

\*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

From table 1 and table 2 it shows that the results of the normality test of self-confidence and responsibility are normally distributed, because the sig value  $> 0.05$ . The Homogeneity Test of Self-Confidence and Responsibility in this study is as follows.

Table 3. Self-Confidence Homogeneity Test

		ANOVA				
Peer teaching		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1,801	1	1,801	.001	.975 <sup>b</sup>
	Residual	22919.932	13	1763.072		
	Total	22921.733	14			

a. Dependent Variable: Posttestself-confident

b. Predictors: (Constant), Pretestself-confident

Table 4. Homogeneity Test of Responsibility

		ANOVA				
Peer teaching		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	219,778	1	219,778	.148	.707b
	Residual	19285.155	13	1483.473		
	Total	19504.933	14			

a. Dependent Variable: Posttest responsibility

b. Predictors: (Constant), Pretest responsibility

From table 3 and table 4 it shows that the results of the Self-Confidence and Responsibility Homogeneity Test are distributed equally (homogeneous), because the sig value is  $> 0.05$ . Then the researcher conducted a hypothesis test to answer the formulation of the research problem, here are the results of the hypothesis test that the researcher conducted.

Table 5. Hypothesis Test of Self-Confidence and Responsibility

Paired Samples Correlations				
N			Correlation	Sig.
Pair 1	self-confident& responsibility	15	.755	.001

The results of the Hypothesis Test in table 5 show that the sig value  $< 0.05$ , which means that the peer teaching learning model can increase students' self-confidence and responsibility in learning Physical Education, Sports and Health in Elementary Schools. Furthermore, the values of the pretest and posttest results of students' self-confidence and responsibility in Elementary Schools at SD Cisurupan 1 can be seen in Figure 1 below.

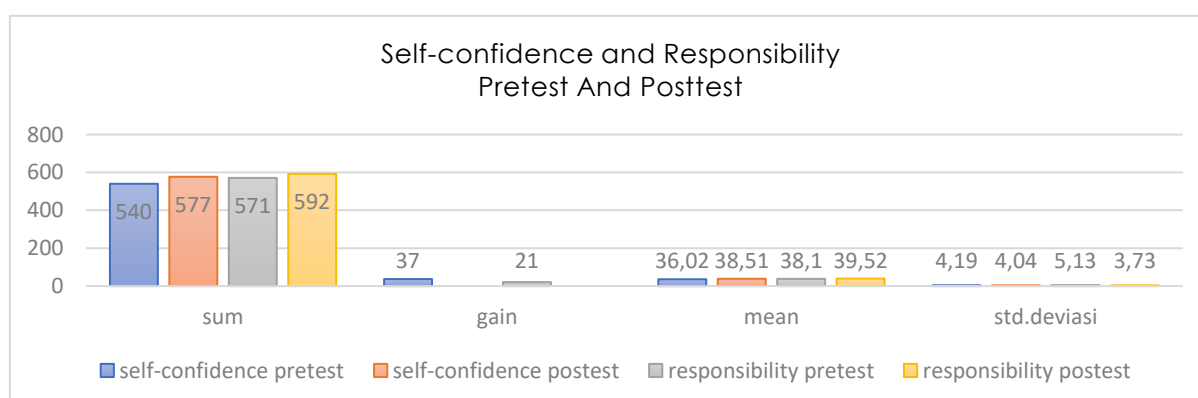


Figure 2. Pretest-posttest of self-confidence and responsibility

Based on Figure 2 above, there is pan increase that shows a positive change in students' self-confidence and responsibility after the treatment (for example, peer teaching learning model or other treatments) is given. (1) Self-confidence, there is an increase in self-confidence of 37



points from pretest to posttest. This increase is also reflected in the increase in the average (mean) from 36.02 to 38.51. And the standard deviation decreased from 4.19 to 4.04, which shows that the distribution of posttest data is slightly more concentrated (more homogeneous) than during the pretest. (2) Responsibility, there is an increase in responsibility of 21 points from pretest to posttest, with an average increasing from 38.1 to 39.52. And the standard deviation decreased from 5.13 to 3.73, which also shows that the posttest results are more homogeneous than the pretest, indicating that the differences between students are decreasing after the intervention.

## 5. Discussion

The results of the tests conducted in this study proved that the peer teaching learning model has a positive influence on the self-confidence and responsibility of elementary school students during physical education, sports and health learning. Several studies in Indonesia that support this finding related to the use of the peer teaching learning model on student self-confidence and responsibility include the peer teaching learning model can activate all students during the learning process and provide opportunities for cooperation between students who have abilities. The peer teaching learning model is effective for class discussions because the procedures used can give students more time to think, respond, and help each other (Hidayat et al., 2024). Overall, the study highlights that the applied learning model, which is most likely based on student collaboration, can improve the quality of class discussions by giving students more time to think about and respond to the material, while creating opportunities for collective learning and supporting each other. Then the learning process using the learning model can increase high self-confidence to influence student learning outcomes (Giyanti, 2018). that cooperative learning increases students' self-confidence, self-esteem, and classroom engagement. By using this technique, teachers can create a more relaxed, competitive, and stress-free atmosphere, where students want to participate in class discussions and enjoy cognitive and affective benefits. The results are discussed in relation to self-efficacy theory, attribution theory, and self-esteem theory (Sadeghi & Ganji, 2020). Therefore, the learning process with the learning model is expected to stimulate students' creative thinking skills, and can train themselves because of frequent interaction and communication at school and at home so that they can motivate students in learning and ultimately produce an effective and enjoyable learning process and can improve student learning outcomes. The peer teaching learning model emphasizes learning that can increase students' interest and motivation to learn during learning by addressing an understanding that will bring up student activity in class, for example by actively asking questions (Asngari & Sumaryanto, 2019). Students must have the ability to analyze learning materials that aim to improve cognitive skills and processes. The most important thing is that students must be interested in the PESH learning process. The process of learning with peers depends on the role of the teacher and the readiness of parents and students for learning with peers. Successful peer teaching with experienced teachers will be successful with various types of students in various classes. The theory underlying this learning situation that encourages peer learning must be known by the facilitator. Both tutors and learners must be aware that peer learning includes learning and teaching (Keerthirathne, 2020). Due to its multifunctional approach, this method will be one of the effective learning approaches if peer-to-peer learning and teaching opportunities are used properly.

The results of this study also discuss the results of the responsibility of elementary school students which provide reinforcement that the peer teaching learning model is able to provide an impact on elementary school students about student responsibility in the PESH learning process at school. Here are some studies that show that responsibility is part of the learning process, when students get prizes or do not get grades, they seem more enthusiastic to work on and complete projects with the best results. However, they have not consciously carried out their own tasks and responsibilities which have the potential for cognitive deficiencies in students' interactions during the teaching and learning process (Syukriah et al., 2020). During learning, students are able to carry out activities together in groups, help each other complete group assignments, share assignments with other group members, talk and share ideas based on

what they know, and talk about these things to their friends, these improvements include improved academic performance, increased levels of critical thinking, increased self-confidence, and improved decision-making skills (Eskiyurt & Ozkan, 2024). The changes made by students have shown their ability to carry out several sub-indicators of this attitude of responsibility, which shows that they are able to show and have a good attitude of responsibility. However, based on the success criteria, the increase in students' attitudes of responsibility has not been successful (Soedimardjono, Fransiska Purwantini., P., 2021).

The latest study in the research conducted is about the impact of the peer teaching model in PESH found new things that have not been discussed in previous studies. This is mainly related to affective responsibility, self-confidence in sports learning activities, and management of physical and social interactions in teaching and learning activities. In addition, the new focus in this study is the context of learning and social interaction, which has not been fully explained in previous studies. In addition, this study focuses on how peer teaching in PESH learning impacts students' self-confidence in the context of physical activity and sports. Active student participation, sports playing skills, and physical interactions between students are closely related to self-confidence in PESH, in contrast to self-confidence in academic tasks. However, researchers are aware of the limitations of this study, therefore further research must identify various elements related to measuring self-confidence, responsibility, teamwork, parent and teacher involvement, and the use of technology that need to be studied further. By studying these new variables, research on peer tutoring learning in PESH can make a broader contribution to comprehensive and high-quality learning in Elementary Schools.

## **6. Conclusion**

In learning Physical Education, Sports, and Health (PESH), the concept of the peer teaching learning model can help elementary school students feel more confident and have greater responsibility. By implementing this concept, students not only become recipients of information but also become teachers or mentors for their friends. Because they are given the opportunity to lead, speak in front of their friends, and improve their communication skills, this can increase their self-confidence. In addition, this model encourages responsibility because students who act as teachers feel that they have a great responsibility to help their friends learn and develop. This encourages them to be responsible for what they achieve together, as well as teaching them the importance of working together and working together in a team. Therefore, the peer learning model can increase students' self-confidence and responsibility in the context of more holistic and effective PESH learning by combining elements such as parent and teacher involvement and the use of technology.

## **Limitation**

This study has several limitations, including: 1) The study was conducted through questionnaires rather than in-depth interviews with respondents, so the data obtained were less in-depth; 2) This study only involved elementary school-aged children in a specific geographic area, so the results may not be generalizable to a wider population with different cultural, demographic, or social backgrounds. 3) The relatively short duration of the research program may limit observations of the long-term impact of developing the application of the peer teaching learning model, because the program can be implemented longer or repeated implementations can increase the impact on the program; 4) Measurement of self-confidence and responsibility can be done with the development of instruments, which allow for capturing all complex aspects, especially in the context of early childhood.

## **Recommendation**

Considering the research findings and limitations found, the following suggestions can be made: 1) Research should involve participants from various cultural, social, and geographical backgrounds. In this way, the research results can be more representative and relevant to a wider population; 2) The peer teaching learning model program should be conducted over a

longer period of time to allow for observation of the long-term impact of the program; 3) It is recommended that future research use more sophisticated and multidimensional tools to measure the variables. The use of qualitative approaches, such as in-depth interviews or participant observation, can also add another aspect to the analysis; and 4) Similar programs can be developed and tested in other sports to evaluate how effective they are in building leadership skills. This can also enrich alternative physical education methods for learning students' characters.

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## Conflict of Interest

All authors have confirmed no conflict of interest in this research.

## Declaration of Generative AI-assisted Technologies

This manuscript was prepared with the assistance of Generative AI ChatGPT and Translator. The AI was used to assist in language refinement, and content organization. All intellectual contributions, critical analyses, and final revisions were conducted by the authors. The authors take full responsibility for the accuracy, originality, and integrity of the content presented in this work.

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