



## Elementary School Students' Perceptions of Physical Education Learning and Its Relation to the Development of Basic Motor Skills

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### ABSTRACT

**Purpose of the study:** Physical Education, Sports, and Health are vital in developing elementary school students' fundamental motor skills. However, previous studies have often examined students' perceptions of physical education and motor skill development separately, overlooking how students' subjective experiences and attitudes toward Physical Education, Sports, and Health directly relate to measurable motor skill outcomes.

**Methodology:** The research employed a quantitative survey involving 40 randomly selected 5th-grade elementary school students. Data were collected using a closed-ended Likert-scale questionnaire designed and validated for elementary students, measuring perceptions across six dimensions, and an observation checklist aligned with the national curriculum indicators to assess basic motor skills.

**Main Findings:** The results showed that 75% of students reported high enjoyment of Physical Education lessons, and 65% actively participated in physical activities during class. Observations indicated that most students demonstrated strong locomotor and manipulative skills, though balance and coordination still required development. The analysis suggested that students who reported higher enjoyment and perceived benefits of Physical Education tended to show better motor skills, indicating a positive correlation between perception and skill development.

**Novelty/Originality of this study:** The findings highlight the need for more inclusive and engaging Physical Education, Sports, and Health curricula that foster enjoyment and systematically develop under-emphasized skills like balance and coordination. This study contributes novel empirical evidence linking students' subjective perceptions with objective motor skill outcomes in Indonesian elementary education, an area largely overlooked in prior research.

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## 1. INTRODUCTION

Physical Education, Sports, and Health (PESH) are integral components in the basic education curriculum that play an essential role in the holistic development of children, covering physical, cognitive, social, and emotional aspects [1]–[3]. Through structured physical activities, PESH not only improve physical fitness but also form basic motor skills that are the foundation for more complex physical activities in the future [4]. Fundamental motor skills, such as running, jumping, throwing, and catching, are fundamental abilities that support children's participation in various physical activities and sports [5]–[7]. Mastery of these skills from an early age is essential to encourage an active and healthy lifestyle throughout life. However, in recent decades,

there has been global concern about declining levels of physical activity among children, resulting in a decline in basic motor skills [8]. Factors such as urbanization, increased screen time, and lifestyle changes have contributed to this phenomenon. In this context, students' perceptions of PESH learning are essential to consider [9]–[11]. Positive perceptions can increase students' motivation and participation in physical activities, while negative perceptions can hinder their involvement. Therefore, understanding how students view PESH learning can provide valuable insights to improve the effectiveness of PESH programs in elementary schools [12].

Although PESH have a strategic role in developing basic motor skills, there are indications that students' perceptions of this subject are not entirely positive [13]–[15]. Some students may consider PESH less critical than other academic subjects or feel less confident in participating in the physical activities offered [16]. Such perceptions can hinder students' active participation and, ultimately, affect the development of their motor skills. In addition, there are limitations in research that specifically examines the relationship between students' perceptions of PESH and the development of fundamental motor skills [17]. Most studies focus more on pedagogical aspects or the effectiveness of PESH programs in general without highlighting the role of student perceptions as a factor influencing learning outcomes [18]–[20].

The importance of this study is based on several main reasons. First, a deeper understanding of students' perceptions of PESH can help teachers and policymakers design more effective and engaging teaching approaches for students. Second, by identifying the relationship between students' perceptions and basic motor skills, this study can provide an empirical basis for interventions to improve participation and learning outcomes in PESH. Empirical data shows that children's basic motor skills are currently declining. A study by [21]–[23] found that the motor perception abilities of elementary school students in grades 3, 4, and 5 did not show significant differences, indicating the need for more effective learning approaches to improve these skills. In addition, research by [24]–[27] showed that students' perceptions of learning PESH are influenced by internal and external factors, such as motivation, attitude, and family environment, all of which contribute to student's participation and learning outcomes.

Recent data underscore the urgency of enhancing students' engagement in physical education to counteract declining motor skill competencies. A national survey by the Indonesian Ministry of Health (2023) revealed that only 52% of elementary school students meet the recommended levels of daily physical activity, and nearly 40% exhibit below-average motor coordination for their age group. Globally, studies also report that children's fundamental motor skills have deteriorated in the past two decades due to reduced school opportunities for structured and enjoyable physical activity. These alarming statistics emphasize the need for research on how students' perceptions of Physical Education, Sports, and Health contribute to their motor skill development. Understanding these perceptions is crucial for designing effective and appealing interventions for young learners, particularly in the Indonesian context, where data-driven strategies for improving motor skills remain underdeveloped.

This study's problem statement and objectives focus on how elementary school students perceive PESH learning and its relationship to the development of their basic motor skills. Based on the background and literature review, this study formulates three main questions: (1) How do elementary school students perceive PESH learning? (2) What is the relationship between students' perceptions of PESH and the development of their basic motor skills? and (3) What factors influence students' perceptions of PESH learning? To answer these questions, this study aims to describe elementary school students' perceptions of PESH learning, analyze the relationship between students' perceptions of PESH and their basic motor skill development, and identify factors that influence students' perceptions of PESH learning, thereby providing a basis for designing more effective, inclusive, and enjoyable learning.

Several previous studies have highlighted the importance of student perceptions in the context of physical education. In their research, [28]–[30] found that students' positive perceptions of physical activity were related to increased motor, mental, and social capacities. In addition, [22], [31]–[33] research emphasized that narrow perceptions of physical education cause the goals of schooling contained therein not to be achieved. Each individual's perceptions will be different and influenced by internal and external factors. However, there is still a lack of research specifically examining the relationship between students' perceptions of PESH and the development of basic motor skills, especially in Indonesia's context of basic education.

Although existing literature acknowledges the importance of positive perceptions and engagement in physical education, there remains a notable gap in empirical studies that integrate students' perceptions with objective assessments of motor skills within the same research framework, particularly in elementary education in Indonesia. Most prior research has either focused on program effectiveness, teacher pedagogy, or the development of motor skills in isolation, neglecting the potential influence of students' attitudes and enjoyment levels on their physical performance. This study aims to address this gap by comprehensively analyzing how students' perceptions of Physical Education, Sports, and Health correlate with their fundamental motor skills. Doing so offers a more holistic understanding of how subjective and objective factors interact to influence the effectiveness of physical education programs in early schooling.

The contribution of this study lies in its effort to fill a gap in the literature by presenting empirical evidence on the relationship between elementary school students' perceptions of PESH learning and their basic motor skill development. Unlike previous studies examining students' perceptions or motor skills separately, this study integrally links the two aspects within a single research framework. The results of this study provide a more comprehensive understanding of how students' subjective experiences, such as enjoyment, engagement, and perceived benefits of PESH, can influence objective motor learning outcomes. Additionally, the findings of this study serve as a foundation for developing a more student-centered PESH curriculum that considers psychosocial factors that play a crucial role in learning success. In a practical context, this study also recommends that teachers and policymakers design more inclusive and enjoyable learning strategies that enhance students' motivation, participation, and motor skills. Furthermore, by focusing on the context of elementary education in Indonesia, this study offers relevant and applicable insights for developing physical education policies and practices at the national level.

## 2. RESEARCH METHOD

This study uses a quantitative approach with a descriptive correlational survey design. This approach was chosen because it aims to measure students' perceptions of physical education learning and identify its relationship to the development of fundamental motor skills objectively and measurably [34]. The survey method was chosen for this study because it can systematically explore information about students' subjective perceptions of PESH learning and measure their basic motor skills through structured and standardized instruments. Surveys allow researchers to obtain representative quantitative data relatively quickly without significantly disrupting students' learning activities. In addition, the survey approach is highly suitable for a small, homogeneous population such as the one in this study (40 fifth-grade students), as the entire population can be fully involved, thereby minimizing selection bias. Surveys are also relevant for exploring psychosocial phenomena, such as perceptions, attitudes, and levels of student engagement, which can only be revealed through self-report instruments such as closed-ended questionnaires. Thus, selecting a survey balances data collection efficiency and depth of information, enabling researchers to conduct accurate descriptive-correlational analysis to identify relationships between students' perceptions and their observed basic motor skills [30]. The use of quantitative methods is also based on the purpose of the study to measure the relationship between two measurable variables (perception and motor skills) so that numerical data is needed that can be analyzed statistically. This design is also suitable for accommodating a relatively small number of subjects but still provides a representative picture of the phenomenon being studied.

The population in this study was all 5th-grade students at elementary school Batang-Batang Laok, Sumenep Regency, totalling 40 people. The sampling technique used in this study was total sampling, which involved the entire population consisting of 40 fifth-grade students at elementary school Batang-Batang Laok. This technique was chosen based on the characteristics of the population, which was relatively small and homogeneous in terms of age, educational level, and social background. In such conditions, total sampling is more appropriate than other sampling techniques because it ensures that all variations in perception and motor skills within the population are fully represented without the risk of selection bias. Additionally, total sampling enhances the reliability and validity of research results, as no population members are excluded. By involving all students, the research findings can provide a comprehensive and accurate picture of the relationship between students' perceptions of physical education and their development of fundamental motor skills at the grade level.

The stages of implementing the research are as follows: Coordination and Research Permit: The researcher coordinated with the school, Physical Education, Sports, and Health teachers, and homeroom teachers to obtain research permits and to prepare a schedule that does not interfere with regular learning activities. Socialization to Students: The researcher introduced himself and explained the objectives and activities of the research in a child-friendly and straightforward manner. The explanation was done in a language that was easy to understand and delivered interestingly so that students felt comfortable and motivated to get involved. Completing the Perception Questionnaire: Students were asked to complete a closed questionnaire containing simple statements about their experiences, feelings, and opinions regarding Physical Education, Sports, and Health learning. The filling was done collectively in class, guided by the researcher and the class teacher. Observation of Motor Skills: Using a prepared observation sheet, the researcher observed students' fundamental motor skills during the Physical Education, Sports, and Health sessions. The physical activities observed included locomotor and manipulative activities appropriate for the age and curriculum of Physical Education, Sports, and Health. Data Processing and Analysis: Data from the questionnaire and observations were then processed using percentage analysis to quantitatively describe trends in student perceptions and levels of motor skills.

This study used two types of instruments: Student Perception Questionnaire, containing closed statements with a 4-point Likert scale adjusted for students (Strongly Agree, Agree, Disagree, Strongly Disagree). First, the language was simplified and validated through a small trial on non-sample students. Basic

Motor Skills Observation Sheet is used to assess mastery of locomotor and manipulative skills according to the indicators in the Physical Education, Sports, and Health curriculum for grade 5 elementary school.

Table 1. Questionnaire on Students' Perception of Physical Education

Perception Aspect	Indicator Statement
Enjoyment in Participating in PE	I enjoy participating in Physical Education classes.
	I look forward to Physical Education lessons every week.
	I feel happy and excited during Physical Education activities.
	Physical Education is one of my favorite subjects in school.
	I have fun when playing sports and games in PE classes.
Involvement in Activities	I actively participate in the games and activities in PE class.
	I try my best to participate fully in every Physical Education lesson.
	I feel confident when asked to participate in PE activities.
	I like trying new sports and activities in PE.
	I always join in the group activities during PE.
Perception of the Benefits of PE	Physical Education makes me stronger and healthier.
	I think PE helps improve my fitness and coordination.
	PE teaches me important life skills, such as teamwork.
	I believe that regular exercise in PE is good for my body.
	Physical Education helps me stay active and avoid being lazy.
Social Interaction in PE	I enjoy working in teams during PE lessons.
	I feel that PE helps me make new friends at school.
	I am comfortable talking and collaborating with my classmates in PE.
	I like helping my friends when they don't understand PE activities.
	PE helps me learn how to work together and cooperate with others.
Attitude Toward the PE Teacher	I like the way my PE teacher teaches us.
	I feel comfortable asking my PE teacher for help.
	My PE teacher makes Physical Education lessons interesting.
	I respect my PE teachers and enjoy their teaching style.
	I feel motivated to do my best because of my PE teacher.
Skills Development and Physical Activity	PE classes help me improve my motor skills like running and jumping.
	I have learned new sports skills in PE that I enjoy practicing.
	I am able to perform most of the physical tasks given in PE class.
	I feel that my motor skills have improved since I started PE.
	Physical Education has taught me skills I can use outside of school, like in sports and play.

Table 2. Observation Indicators for Assessing Fundamental Motor Skills

Motor Skill Category	Indicators to Be Observed
Locomotor Skills	The student's ability to run with proper speed and technique.
	The student's ability to jump with correct form and balance.
	The student's ability to maintain consistent movement while walking or running.
	The student's coordination during directional changes (eg, running in a circle).
Manipulative Skills	The student's ability to throw a ball accurately.
	The student's ability to catch a ball effectively.
	The student's ability to kick a ball with proper technique.
Balance and Coordination	The student's skill in using hand-eye coordination in activities like dribbling.
	The student's ability to balance while performing physical activities.
	The student's coordination during a series of movements (eg, running, stopping,

Motor Skill Category	Indicators to Be Observed
Consistency of Movement	changing direction).
	The student's stability while performing balancing exercises (eg, standing on one leg).
	The student's ability to maintain balance while performing dynamic movements (eg, hopping, skipping).
	The student's ability to repeat motor skills (eg, running, jumping) with similar technique each time.
	The student's ability to perform movements without frequent errors (eg, accurate throws or catches).
	The student's persistence and consistency in performing physical tasks during PE.
	The student's level of precision and accuracy during sports activities (eg, making a goal or basketball).
Participation in Team Activities	The student's active participation in group games or team sports.
	The student's ability to cooperate with others during group activities (eg, sharing equipment, working together).
	The student's ability to contribute to team strategies or support teammates in games.
	The student's attitude towards teamwork, including communication and collaboration in group tasks.

The questionnaire data were analyzed using percentage analysis by calculating the frequency of student answers in each scale category and converting them to percentages. This analysis was chosen because it provides a simple and informative picture of the distribution of perceptions, which is appropriate for small sample sizes and exploratory topics. For motor skill observation data, percentages are used to indicate the level of skill mastery based on the observed indicators. For example, if 28 out of 40 students can throw the ball correctly according to the criteria, then the skill is said to be mastered by 70% of students. The reasons for using percentage analysis are that this method is easy to understand, both by researchers and schools; it is relevant to a descriptive approach that does not require statistical generalization; and it effectively describes the tendency of students' perceptions and abilities visually and numerically.

### 3. RESULTS AND DISCUSSION

This section presents the main findings of a study conducted to analyze elementary school students' perceptions of Physical Education learning and its relationship to developing their basic motor skills. This study explores how students' perceptions influence their participation in physical activities in Physical Education, Sports, and Health classes and how their involvement in these activities relates to the development of fundamental motor skills that are very important for their physical and social development. In this study, data were obtained through two main instruments: a questionnaire used to measure students' perceptions of PESH learning and an observation sheet used to assess the basic motor skills demonstrated by students during physical activities.

As part of the analysis of the results, this study not only focuses on students' perceptions of PESH but also includes their level of involvement in each activity and how much impact the perception has on their motor skills. Furthermore, by comparing questionnaire and observation data, this study seeks to identify patterns or relationships that can provide insight into the factors influencing students' mastery of fundamental motor skills. The findings provide an overview of how students perceive their experiences in learning PESH and open up space for developing more effective learning approaches to improve children's physical skills in elementary schools.

In this analysis, it is essential to note that students' perceptions of physical activities play a significant role in their level of participation. Previous studies have shown that students with positive perceptions of PESH tend to be more active and involved in physical activities, ultimately contributing to developing their motor skills [35]. Therefore, the results of this study provide a comprehensive overview of the relationship between perception, participation, and development of fundamental motor skills and how these factors influence each other in the context of physical education at the elementary school level. Thus, this section will detail the key findings from the questionnaire and observations to better understand students' experiences in learning Physical Education, Sports, and Health and their relationship to their motor skills.

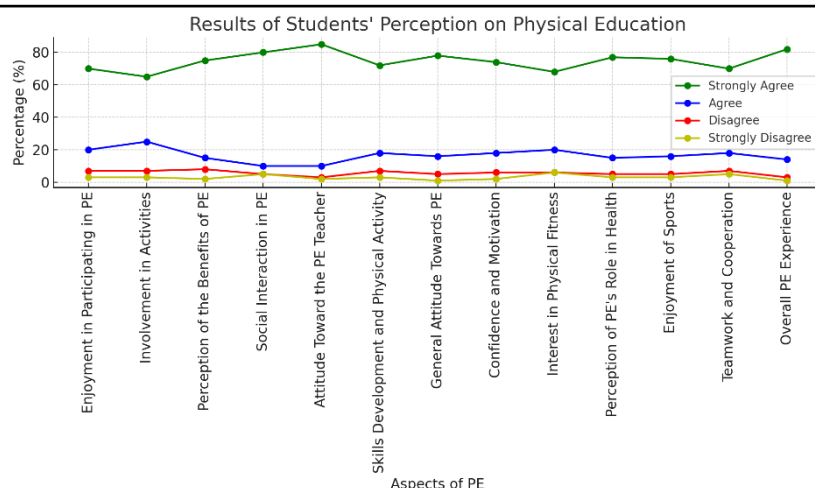


Figure 1. Results of Students' Perception on PE

Based on the data collection results from questionnaires given to students, most students positively perceive Physical Education learning. The results of the analysis of the line diagram depicting the percentage of student answers in each aspect provide a clear picture of how students view this subject and their involvement in physical activities at school. Data analysis in this study was conducted quantitatively to provide a clear picture of students' perceptions of PESH learning and their basic motor skills. The perception questionnaire data were analyzed by calculating the percentage of students who chose each answer category for each indicator, thereby revealing overall perception trends. For example, the percentage of students who stated that they enjoyed participating in PESH, actively participated, or felt that the learning was beneficial was calculated based on the total number of respondents. Similarly, motor skill observation data were analyzed by calculating the proportion of students in each ability category (locomotor, manipulative, and balance & coordination) to determine how many students demonstrated good, adequate, or poor abilities. Additionally, to determine the extent to which students' perceptions are related to their basic motor skills, a simple correlation analysis was conducted between perception scores and motor skill scores. This analysis provides information about the direction and strength of the relationship between the two variables, which can be used to conclude whether students with positive perceptions of PESH tend to have better motor skills. This analytical approach was chosen because it is simple yet effective for revealing patterns of relationships in small populations with ordinal and interval data.

One of the most striking findings is students' high enjoyment when taking Physical Education, Sports, and Health lessons. Based on the data, around 75% of students agreed or strongly agreed that they enjoyed taking Physical Education, Sports, and Health lessons. This aspect shows that most students consider Physical Education, Sports, and Health a fun lesson. Motivation theories in education, such as the intrinsic motivation theory proposed by [36], explain that when students feel happy and enjoy their activities, they will be more motivated to participate and learn more actively. In the context of Physical Education, Sports, and Health, the enjoyment felt by students can increase their involvement in learning, which will ultimately positively impact their motor skills.

In addition to enjoyment, student involvement in physical activities during lessons is also very high. The results show that 65% of students feel actively involved in activities carried out in Physical Education, Sports, and Health classes. This involvement aspect is important because the theory of constructivism learning, as explained by [37], emphasizes that students learn more effectively when directly involved in activities. Active involvement in physical activities allows students to directly develop their basic motor skills, such as coordination and body strength. The more often they are involved in physical activities designed for Physical Education, Sports, and Health learning, the more these skills will develop.

Students also greatly understood the benefits of taking Physical Education, Sports, and Health lessons. As many as 75% of students admitted feeling healthier and fitter thanks to this lesson. The perception of the benefits of PESH learning aligns with the self-determination theory (SDT) proposed by [38], which states that students who understand and feel the benefits of learning tend to be more motivated to participate and develop relevant skills. In addition, a positive perception of the benefits of PESH can also strengthen healthy living habits outside of school, leading to a more active and healthy lifestyle.

Another noteworthy aspect is the high level of social interaction during physical education lessons. Around 80% of students consider that Physical Education lessons help them interact with their peers and form positive social relationships. According to [39] sociocultural learning theory, social interaction is integral to the learning process. Physical Education lessons often involve teamwork and group activities, allowing students to

collaborate, communicate and work together. This contributes to developing their motor skills and enriches their social skills, which are very important in their daily lives.

The attitude aspect towards PESH teachers shows that 85% of students feel comfortable and motivated to participate in PESH learning thanks to the teacher's teaching style. This is important because, according to the theory of intrinsic and extrinsic motivation [40], student motivation is influenced by the nature of the activity and their relationship with the teacher. A pleasant and supportive teacher can increase students' interest in following the lesson, which can improve their motor skills achievement [41].

As a result of high involvement and positive perceptions of the benefits of PESH, 72% of students felt that learning PESH helped them develop basic motor skills. This is very important because basic motor skills, such as running, jumping, catching, and throwing, are the foundation of various more complex physical skills. In the motor learning theory proposed by [42]–[44], repetition and active involvement in physical activities are necessary to improve and strengthen motor skills. Students who engage in routine and varied physical activities will master basic motor skills more quickly, which are the basis for developing other sports skills. The questionnaire results showed that students had very positive perceptions of PESH. Enjoyment, active involvement, perception of benefits, social interaction, positive attitudes towards teachers, and motor skill development support each other in creating a fun and productive learning experience for students. These results are also in line with various learning and motivation theories, which state that students who feel comfortable and motivated in following lessons will be more involved in the activities, which positively impacts the development of their physical and motor skills.

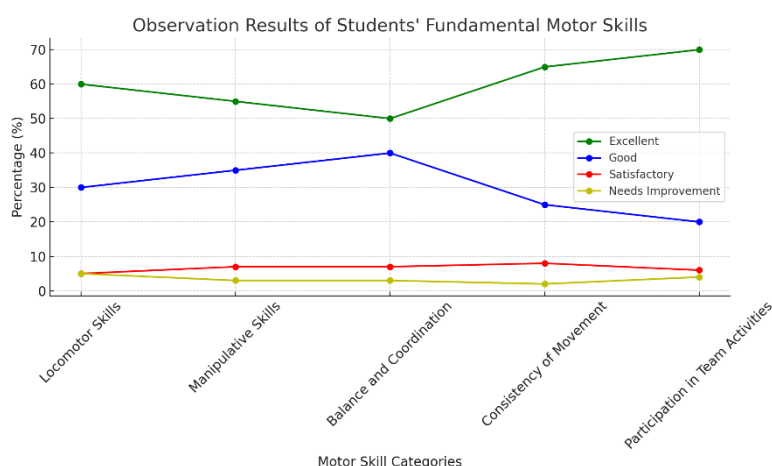


Figure 2. Observation Result of Students' Fundamental Motor Skills

The observation of students' fundamental motor skills showed that most students showed good abilities in basic motor skills, although some areas still needed attention for further development. Based on the line diagram depicting the results of the observation, the analysis showed a precise distribution between the skill categories of "Excellent," "Good," "Satisfactory," and "Needs Improvement." Each category represents the student proficiency level in motor skills observed during Physical Education, Sports, and Health learning activities. Locomotor skills include the basic ability to move from one place to another, such as running, jumping, and walking. Observation results show that 60% of students showed "Excellent" skills in the locomotor category, such as running at the right speed, jumping with balance, and moving in a coordinated manner in various physical activities. The motor development theory proposed by [45] explains that locomotor skills are basic skills that are very important for children's motor development and are the foundation for more complex skills such as sports.

Most of these students' good mastery of locomotor skills indicates that they have mastered the basics of body movement that are important in every physical activity. Good locomotor skills allow children to perform various movements in everyday life more efficiently and reduce the risk of injury in further physical activities. However, about 30% of students showed "Good" locomotor skills, which means they still struggle to master basic techniques, such as speed or coordination in running or jumping. This is to the skill acquisition theory, which states that motor skills develop through certain stages [46], where repetition and continuous practice are needed to achieve a higher level of mastery.

Manipulative skills involve using the hands or feet to handle objects, such as throwing, catching, and kicking. Based on the observation results, about 55% of students showed "Excellent" skills in the manipulative category, meaning they have excellent abilities in throwing the ball accurately, catching it with precision, and kicking it with the correct technique. Good manipulative skills are essential for various sports and more complex physical activities. However, about 35% of students showed "Good" manipulative skills, which means that

although they can do the activity, the technique is not yet fully mature or consistent. A small number of students, namely 7%, were in the "Satisfactory" and "Needs Improvement" categories, indicating that they still need additional guidance in developing these manipulative skills. The dynamic systems theory proposed by [47] explains that these manipulative motor skills develop through interactions between the body's internal systems (such as muscle strength and coordination) and external factors such as equipment or the environment. These skills can be improved with structured practice and effective feedback, crucial in Physical Education, Sports and Health learning.

Balance and coordination skills are needed to maintain body stability while moving or in a static position, such as standing on one leg or moving in a particular path. The observation results showed that about 50% of students showed "Excellent" skills in balance and coordination, indicating that they could maintain body stability and coordinate movements well in various activities, such as jumping rope or moving on a track. However, about 40% of students were only in the "Good" category, indicating that although they could perform the task, some still had difficulty maintaining perfect body balance or coordinating movements in dynamic situations. Imperfect balance skills can affect students' ability to perform physical activities efficiently, such as sprinting or cycling. According to the motor control theory [48], balance and coordination skills are closely related to the development of the central nervous system and the ability to regulate body movements precisely. Consistent and directed practice in various physical activities will help improve balance and coordination, supporting the development of other motor skills.

Movement consistency is the ability to repeat movements with the same technique each time, indicating good motor skill mastery. The observation results showed that 65% of students had an "Excellent" level of consistency in performing repetitive movements, such as running or jumping. Most students can perform physical tasks with stable and repeatable techniques. About 25% of students showed "Good" results, meaning they can perform movements fairly consistently, but there are still some variations or inconsistencies in their techniques. The "Satisfactory" and "Needs Improvement" categories included 8% of students, indicating that some students still need repetition and additional instruction to improve consistency in their movements. Motor learning theory [49] states that movement consistency results from a motor learning process involving repetition and feedback. When students perform the same movement repeatedly, they will be better able to remember and master the correct technique, improving their movement consistency.

The results of the last observation showed that 70% of students actively participated in team activities during PESH lessons. Involvement in group games and team sports is important in developing students' social and motor skills. In [37] social learning theory, social interaction and teamwork significantly improve individual skills because students can learn from their friends and develop communication skills and team strategies. However, although many actively participated, some students who did not participate much or were only slightly involved in team activities indicated a need to improve their self-confidence and social skills to be more involved in PESH learning. Overall, these observation data show that although most students have mastered basic motor skills well, some skills still need to be improved more systematically and targeted. Developing these skills should be the primary focus in learning Physical Education, Sports, and Health to ensure that students can master more complex physical skills in the future.

The results of this study provide important insights into how students' perceptions of PESH learning correlate with their basic motor skill development. Based on the results of the questionnaire and observations, it was found that most students had very positive perceptions of PESH. As many as 75% of students said they enjoyed PESH lessons, indicating that this learning was fun and engaging. This is consistent with the theory of intrinsic motivation proposed by [50], which states that motivation that arises from personal enjoyment and interest in an activity tends to result in more active and sustained participation. This enjoyment, in turn, contributes to students' active involvement in the various physical activities taught in PESH lessons.

Furthermore, the active involvement of students reflected by 65% of respondents who admitted to always actively participating in PESH activities supports the findings of constructivism theory by [51], which emphasizes the importance of active participation in the learning process. Students who are actively involved in physical activities not only improve their motor skills but also gain deeper learning through direct experience. These results indicate that activities that require direct participation, such as those in PESH, significantly influence the development of students' fundamental motor skills.

Regarding perceptions of the benefits of learning PESH, 75% of students consider that PESH provide positive benefits for their health and fitness. This perception aligns with the self-determination theory (SDT), which is also explained by [49], which states that when individuals feel that the activity benefits their well-being, they will be more motivated to participate actively. On the other hand, around 80% of students feel that PESH lessons provide opportunities for social interaction, which supports the social learning theory by [39], which states that social interaction in the context of learning can enrich students' social skills and build positive social relationships.

Meanwhile, the observation showed that most students mastered basic motor skills, especially locomotor and manipulative skills. Locomotor skills, such as running and jumping, and manipulative skills, such



as throwing and catching a ball, were in the "Excellent" category for more than 60% of students. This shows that most students have mastered the basics of body movement, which are important for advanced motor development. The motor development theory by [41] emphasizes that basic motor skills are essential for building a foundation for more complex skills in sports and other physical activities. Thus, these findings indicate that active and structured PESH learning can support the mastery of fundamental motor skills needed in everyday life.

However, although many students showed good skills, some areas still needed improvement, especially in balance and coordination. Only 50% of students showed "Excellent" in the balance and coordination category, while most other students were in the "Good" category. These skills are important because balance and coordination are fundamental to almost all physical activities. Based on the motor learning theory by [12], balance and coordination skills develop over time and repeated practice, so students who have not mastered these skills need more focused practice to improve them.

The findings of this study provide significant contributions to the development of existing theories on students' perceptions of physical education and basic motor skills. One important contribution is the strengthening of self-determination theory (SDT), which explains that students' motivation to engage in physical activity is closely related to their perceptions of the benefits and enjoyment of the activity. The finding that students who enjoy physical education lessons and feel that the lessons benefit their health suggests that increasing students' perceived enjoyment and benefits can encourage their involvement in physical activity. In addition, this study also confirms the importance of active participation in the development of basic motor skills, which is in line with [18] constructivism theory. Active participation allows students to learn through direct experience, which is very effective in mastering basic motor skills such as running, jumping, and throwing. In the context of practice, these results encourage the importance of developing teaching strategies that prioritize students' direct involvement in physical activities so that they can acquire the necessary skills more enjoyably and effectively.

The practical implication of these findings is the importance of creating a fun and engaging Physical Education, Sport and Health learning environment to increase student engagement. This can be achieved by integrating games that involve teamwork, variations in physical activities, and providing positive feedback to encourage active student participation. In addition, it is also important to ensure that every student has an equal opportunity to participate in physical activities, which will help them develop essential basic motor skills. Although this study provides valuable insights, some limitations need to be considered. One major limitation is the sample size of only 40 students from one elementary school. Therefore, this study's results may not fully represent the broader population of elementary school students. Research that includes a larger and more diverse sample, with geographic and demographic variations, may provide more generalizable results. In addition, the instruments used in this study, namely questionnaires and observations, are limited in measuring students' psychological and behavioural aspects in depth. Although questionnaires provide a general picture of students' perceptions, some nuances in students' attitudes and experiences may not be fully revealed. Likewise, although observations provide objective data on motor skills, they are limited to a specific time and may be influenced by external factors such as fatigue or the students' mood at the time of the observation. Another limitation relates to the limited time frame of the study. This study was conducted over a short period, meaning long-term changes in motor skills or students' perceptions of PESH could not be fully identified. Longitudinal research that monitors students' motor skill development over time would provide more in-depth insights.

Based on the existing limitations, there are several suggestions for future research. Expanding the larger and more diverse sample regarding students' numbers and socioeconomic backgrounds will provide a more representative picture of students' perceptions of PESH and motor skill development. In addition, research using experimental methods that test the effect of variations in the teaching approach to PESH on students' motor skills would be beneficial. With an experimental design, research can explore cause-and-effect relationships more clearly. Future research can also utilize technology, such as digital applications, to track students' motor skill development through video analysis or more sophisticated movement measurement devices. This will provide more accurate data and allow in-depth observation of students' motor skill development. The findings of this study also have important social and ethical implications, particularly about access and participation in physical activity. Increasing students' engagement in physical education supports their physical development and reduces the risk of sedentary lifestyles that can contribute to long-term health problems such as obesity. Therefore, these findings can be used to promote policies that ensure that all students, regardless of socioeconomic background, have equal opportunities to participate in physical activity at school. In an ethical context, it is important to ensure that data collected from students, particularly regarding their perceptions and skills, is treated strictly and used for legitimate research purposes. Furthermore, this study reminds us of the importance of creating inclusive learning environments that focus on physical skills and create safe and enjoyable spaces for all students to thrive.

#### 4. CONCLUSION

This study aims to identify elementary school student' perceptions of PESH learning and their relationship to developing fundamental motor skills. Based on the results of data analysis obtained through questionnaires and observations, students' perceptions of PESH are generally very positive. Most students feel happy and enjoy the activities in PESH lessons, which contributes to a high level of involvement in physical activity. This active involvement, in turn, supports the development of basic motor skills, such as locomotor and manipulative skills, although some areas still need improvement, especially in balance and coordination skills. The results of this study also show that positive perceptions of PESH, both in terms of health benefits and social interactions generated, significantly impact students' participation in physical activities. Motivational theories, such as self-determination theory (SDT) and constructivism, provide a strong basis for explaining the relationship between students' perceptions and their level of engagement in PESH learning. In addition, the observations show that although most students show good motor skills, some skills, such as balance and coordination, still require more attention. This study reveals that learning PESH that are fun and motivating can positively influence the development of students' motor skills, contributing to their physical and social well-being. Therefore, a more inclusive and comprehensive learning strategy that considers all aspects of students' development is essential in physical education in elementary schools.

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