

**Skills and Physical Literacy Activities of Primary School Age Children****Muhammad Yusron Afandi<sup>1✉</sup>, Agung Yuda Aswara<sup>2</sup>, Susilo Bekti<sup>3</sup>**Universitas Insan Budi Utomo, Malang City, Indonesia<sup>123</sup>**Article History**

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**Keywords:**Skill; Physical Literacy;  
Primary School Children**Abstract**

At the age of elementary school children, they should still be doing physical activities more actively. But in reality, the development of technology has made them more lazy in doing physical activities. The purpose of this study is to provide an understanding of physical literacy for elementary school children where this factor is one of the foundations that must be implemented properly. This research is a comparative causal research with a quantitative approach. In this study there are two samples to be studied, namely class teachers and physical education, sports and health teachers. The instrument in this study used a questionnaire that contained a list of questions regarding the independent variable about the perception of the level of physical literacy skills of elementary school children according to class teachers and physical education, sports and health teachers. This instrument uses a Likert scale with 10 alternative answers. The subjects in this study were class teachers and physical education, sports and health teachers totaling 78 teachers, 21 class teachers with details of 16 female teachers and 5 male teachers and 57 physical education, sports and health teachers with details of 19 women and 38 men. The youngest respondent teacher was 20 years old and the oldest was 57 years old. The research results are: 1) The level of physical literacy skills of primary school-age children according to class teachers shows good qualifications with a value of 4 with a range of values of 97.1905; 2) The level of physical literacy skills of primary school-age children according to physical education teachers shows good qualifications with a value of 4 with a range of values of 106.6; 3) From the results of the calculation there is no difference in the average level of physical literacy skills of primary school-age children according to class teachers and according to physical education teachers. The conclusion of this study is that the overall level of physical literacy skills of elementary school children according to class teachers and physical education teachers shows good qualification results.

**How to Cite**

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## INTRODUCTION

Education is very important for human life, because education is a process of humanizing humans. For this reason, education is one of the processes that can be used as an alternative for character education, so that the realization of human norms. From many studies conducted in the field of physical education, it shows that the physical education curriculum is not appropriate and satisfactory (Ljubojevi, 2016). Education is not only a process that takes place in the classroom. Sports education or physical education is a form of education aimed at encouraging the formation of students in accordance with national goals. Then (Budi, 2019) explained that physical education is one of the subjects that must be followed by students as a means for students to be able to develop their potential through various physical activities.

Education is universal, can be divided into several aspects, one of which is physical education according to (Burstiando, 2017) stated that in learning activities at school students are equipped with various kinds of things from cognitive, affective and psychomotor learning. Conditions which cause a lack of opportunities for children to do physical activity in physical education, also cause many physical education teachers to be unable to achieve the goals of physical education (Sugiarto, 2015).

Due to advances in science and technology, children in elementary school tend to do less physical activity such as playing, which should be physical but is replaced with games and lack of living a healthy lifestyle (Subekti, 2020) (Sunarwan, 2022) (Setiawan, 2021). Students' high use of information technology makes students' sports activities less active, thus affecting students' low physical activity (Yange, 2018). One of the indicators of lazy student movement is the tendency to decrease students' physical fitness levels and low student participation in physical education and extracurricular sports activities. It is necessary to consider the policy of time allocation requirements in physical education and sports at the education level unit, both in elementary, junior high, and high school. Physical Education (PE) lessons are a vehicle for students to perform various Physical Activities (PA) and sports games (Lin, 2020). Children spend most of their time at school seated or sedentary. Physical education classes are a deterrent to excessive sedentary behavior in schools (da Costa, 2017).

Teacher independence for classroom management is an important component of teach-

er identity that has implications for the quality of teaching (Lazarides, 2020). Regular physical education in schools has an effect on improving academic achievement, non-cognitive skills, motor skills and physical activity (Knaus, 2020). Children's involvement in physical education and sports has a positive association with functional body shape (Allen, 2019). Physical education reduces feelings of loneliness and insomnia and disciplined physical education activities have a protective effect on mental health (Madeira, 2019).

Physical education reduces feelings of loneliness and insomnia and disciplined physical education activities have a protective effect on mental health (Schulenkorf, 2019). Therefore, school physical activity promotion should be integrated with and support teaching activities (Bentsen, 2021). Physical activity and exercise play an important role in the primary, secondary and tertiary prevention of various diseases and also to improve productive physical performance and daily living activities (Langhammer, 2018). There is an assumption that mandating the demand for physical education time allocation will lead to adjustments in school time and increase the duration of physical education time, whereas in theory, adolescents will be more physically active and this will improve health problems such as obesity (Landi, 2021). Adolescents who exercise show greater exercise satisfaction, more favorable health indicators, higher physical activity-related compared to those who do not exercise (Lemes, 2021).

Listening, learning, and imitating activities in physical education learning will certainly require literacy skills in students (Wulandari, 2023). Sports education is a sports-based physical education curriculum and learning model adopted to operationalize physical literacy, in this case students' physical abilities and activities (Wang, 2021). Physical education is one of the education in elementary schools that aims to develop students' movement skills (Awwaliyah, 2015). The teacher's duties as a teacher (instructional) include the task of planning teaching programs, implementing programs that have been prepared and conducting assessments after the program is implemented (Haryani, 2022). School efforts to improve students' physical fitness, only through physical learning which is given once a week, students should do sports activities a week need 3-5 times to maintain their physical fitness level (Hidayat, 2019). Physical education taught at school is expected to make students accustomed to healthy living and enjoy doing active physical activi-

ties every day. Monitoring physical fitness status is also very important, because it is an evaluation tool for students to improve their physical fitness.

Childhood obesity and increasing physical inactivity among children threaten future health, and these issues need to be addressed now if we are to prevent future generations of children from growing up with chronic health problems. Physical inactivity contributes to poor physical fitness, increased healthcare costs, reduced quality of life, and shorter life expectancy.

Research shows that without the development of physical literacy, many children and adolescents are reluctant to do physical activities and sports and they tend to be lazy in filling their spare time. The industrial revolution 4.0 with its accompanying technological sophistication is so indulgent, many adults play gadgets (smartphones, laptops and others) more than doing physical activities and make lazy moving behavior a daily routine, including children. It is not surprising that children are more likely to have the ability to operate smartphones better and skillfully than adults, this is due to the greater interest of school students in social media, online games, and various features that are available.

Not only that, the cheap price of motorized vehicles, especially motorcycles, and the various facilities provided by motorcycle dealers also contribute greatly to the decline in physical activity in school children. It has become a common sight if the activities of going to and from school of many elementary school children are picked up by parents, very rarely even can be said that there are almost no children who go home from school walking hand in hand and together with their friends. Consciously a child's need for movement is reduced by the various facilities available today. The purpose of this study is to provide an understanding of physical literacy for elementary school children where this factor is one of the foundations that must be implemented properly.

## METHODS

This research is a comparative causal research with a quantitative approach with the specificity of the problem in the form of cause and effect between two or more variables. In this study there are two samples to be studied, namely class teachers and physical education, sports and health teachers. In this study using independent variables and the independent variable is the te-

acher, the more detailed variables in this study are "the perception of elementary / Madrasah ibtidaiyah class teachers (X1)" and "the perception of elementary / Madrasah ibtidaiyah physical education teachers (X2)". In this case the teacher acts as a respondent who conveys his views on the physical literacy of elementary school children. The object of this research is the perception of class teachers and physical education, sports and health teachers of elementary schools towards physical literacy of elementary school children. Meanwhile, the subjects of this study were class teachers and physical education, sports and health teachers of elementary and Madrasah ibtidaiyah who participated in a seminar (webinar) held through a video conference platform. The instrument in this study used a questionnaire that contained a list of questions regarding the independent variable about the perception of the level of physical literacy skills of elementary school children according to class teachers and physical education, sports and health teachers. This instrument uses a Likert scale with 10 alternative answers.

This study was conducted with the aim of knowing the differences in perceptions of physical literacy of elementary school children according to class teachers and according to physical education teachers. The subjects in this study were class teachers and physical education, sports and health teachers totaling 78 teachers, 21 class teachers with details of 16 female teachers and 5 male teachers and 57 physical education, sports and health teachers with details of 19 women and 38 men. The youngest respondent teacher was 20 years old and the oldest was 57 years old. Respondents in this study were mostly undergraduate-qualified teachers (S1) spread across cities/districts in East Java Province.

## RESULTS AND DISCUSSION

From the results of the analysis above, it can be seen that most of the class teachers are female, namely 16 teachers (76.2%), and male, namely 5 teachers (23.8%).

This research is a quantitative study with a single mean test analysis method (t-test) to determine the average difference in perceptions of the level of physical literacy movement skills of elementary school children according to class teachers and according to physical education, sports and health teachers. Data collection was carried out by distributing questionnaires to respondents

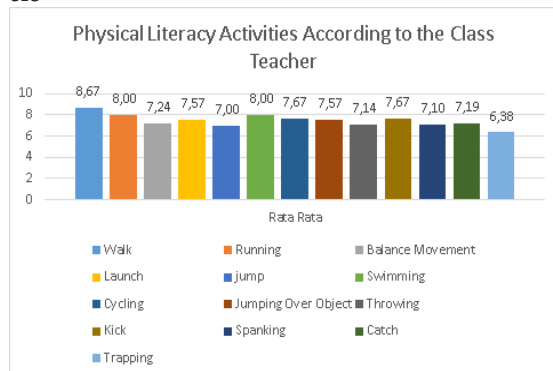
**Table 2.** Descriptive frequency of class teachers

	Walk	Run- ning	Bal- anced Move- ment	Launch	Jump	Swim- ing	Cy- cling	Jump- ing over Ob- jects	Throw- ing	Kick	Spank- ing	Catch	Trap- ping
N	21	21	21	21	21	21	21	21	21	21	21	21	21
Aver- age	57	57	57	57	57	57	57	57	57	57	57	57	57
Center value	8,67	8,00	7,24	7,57	7,00	8,00	7,67	7,57	7,14	7,67	7,10	7,19	6,38
Std. Deviasi	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	7.00	7.00
Varians	1.017	1.183	1.998	1.938	2.280	2.098	2.153	1.599	1.878	1.983	2.119	1.692	2.500
Dis- tance	1.033	1.400	3.990	3.757	5.200	4.400	4.633	2.557	3.529	3.933	4.490	2.862	6.248
	7	6	2	3	1	2	1	4	3	1	1	4	1

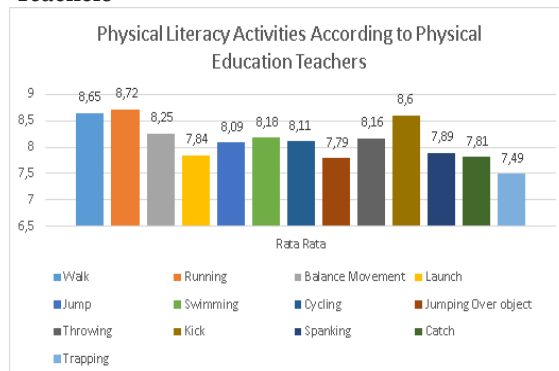
**Table 3.** Descriptive frequency of physical education teachers

	Walk	Run- ning	Bal- anced Move- ment	Launch	Jump	Swim- ing	Cy- cling	Jump- ing over Ob- jects	Throw- ing	Kick	Spank- ing	Catch	Trap- ping
N	57	57	57	57	57	57	57	57	57	57	57	57	57
Aver- age	21	21	21	21	21	21	21	21	21	21	21	21	21
Center Velue	8.65	8.72	8.25	7.84	8.09	8.18	8.11	7.79	8.16	8.60	7.89	7.81	7.49
Std. Deviasi	9.00	9.00	8.00	8.00	8.00	8.00	9.00	8.00	9.00	9.00	8.00	8.00	8.00
Varians	1.316	1.278	1.618	1.878	1.629	1.627	2.067	1.897	1.811	1.689	1.729	1.684	1.983
Mini- mun	1.732	1.634	2.617	3.528	2.653	2.647	4.274	3.598	3.278	2.852	2.989	2.837	3.933
Maksi- mum	2	4	1	1	3	4	1	1	1	1	1	1	1
Total	10	10	10	10	10	10	10	10	10	10	10	10	10
	493	497	470	447	461	466	462	444	465	490	450	445	427

**Diagram 1.** Descriptive frequency of class teachers



**Diagram 2.** Descriptive Frequency of Classroom Teachers



through online networks.

**Table 1.** Descriptive statistics

	Class Teacher	Physical Education Teacher
N	21	57
Average	97,19	105,56
Center value	99,00	108,00
Std. Deviasi	17,671	17,718
Varians	312,262	313,929
Distance	64	95
Minimum	66	35
Maksimum	130	130
Total	2041	6017

Based on **Table 2** and **Diagram 1** above, it can be seen that the highest level of physical literacy skills according to the perceptions of classroom teachers is the skills and preferences of walking with an average of 8.67, followed by running skills and preferences with an average of 8.00, swimming skills and preferences with an average of 8.00, cycling skills and preferences with an average of 7.67, kicking skills and preferences with an average of 7, 67, skills and preferences for sliding with an average of 7.57, skills and preferences for jumping over objects with an average of 7.57 skills and preferences for moving in balance with an average of 7.24 skills and preferences for catching with an average of 7.19, skills and preferences for throwing with an average of 7.14, skills and preferences for hitting with an average of 7.10, and skills and preferences for trapping with an average of 6.38.

Based on **Table 3** and **Diagram 2** above, it can be seen that the level of physical literacy skills according to the perception of pjok teachers, the highest is the highest is the skills and preferences of running with an average of 8.72, then the skills and preferences of walking with an average of 8.65, skills and preferences of kicking with an average of 8.6, skills and preferences of moving in balance with an average of 8.25, skills and preferences of swimming with an average of 8.18, skills and preferences for throwing with an average of 8.16, skills and preferences for cycling with an average of 8.11, skills and preferences for jumping with an average of 8.09, skills and preferences for hitting with an average of 7.89, skills and preferences for sliding with an average of 7.84, skills and preferences for catching with an average of 7.81, skills and preferences for jumping over objects with an average of 7.79 and skills and preferences for trapping with an average of 7.49.

**Descriptive statistics of physical education teacher class group**

The data description presented is in the form of questionnaire data on the level of physical literacy movement skills filled in by the subjects of class teachers and corner teachers which includes the mean (average) and standard deviation.

**Table 4.** Data description

Description	Class Teachers	Physical Education Teachers
Average	97,85	105,19
Standart Deviasi	17,863	17,789

From the **Table 4** above, it is known that the average (mean) value of the level of physical literacy skills according to the class teacher is 97.85 and the corner teacher is 105.19, while for the standard deviation the class teacher is 17.863 and the corner teacher is 17.789.

**Hypothesis Test**

1. The level of physical literacy skills of primary school-age children according to class teachers meets the good criteria set by.

Decision: since the value of  $\alpha$  (0.005) > Sig. (2-tailed) (0.002), then H0 is rejected or H1 is accepted, meaning that the level of physical literacy skills of elementary-aged children according to class teachers meets the predetermined criteria.

2. The level of physical literacy skills of primary school-age children according to physical education, sport and health teachers meets the established criteria.

Decision: because the value of  $\alpha$  (0.005) > Sig. (2-tailed) (0.000), then H0 is rejected or H1 is accepted, meaning that the level of physical literacy skills of elementary school children according to physical education, sports and health teachers meets the predetermined criteria..

3. There is a difference in the average level of physical literacy skills of primary school-age children according to class teachers and according to physical education, sport and health teachers.

Decision: because the value of  $\alpha$  (0.005) < Sig. (2-tailed) (0.068), then H0 is accepted or H1 is rejected, meaning that there is no difference in the average level of physical literacy skills of primary school-age children according to class teachers and according to physical education of Primary school/Madrasah ibtidaiyah.

Based on the results of data processing using SPSS series 13, it can be found that the answers to the questions posed in this study are the level of physical literacy skills of primary age children according to class teachers and according to physical education, sports and health teachers, there is no significant difference. This is because class teachers have pedagogical competence, personality competence, professional competence, social competence and interact with students every day and always pay attention to student behavior, as well as student physical activity from morning until the end of class hours or until students go home. This is reinforced by student guardians continually reporting their children's daily development and physical activity at home to the teacher. Thus, the teacher's perception of the level of physical literacy skills of elementary school children meets the established criteria. Likewise, the corner teacher has the competencies of pedagogical competence, personality competence, professional competence, social competence, mastering learning theories related to physical activity, communicating effectively, empathically with students. Corner teachers also conduct regular assessments and evaluations, master the material, structure, concepts, and scientific mindset that support the subjects they teach. Corner teachers also master aspects of kinesiology and physical performance, theories of movement development, including aspects that influence it. Corner teachers understand learning theories of movement, including basic and complex skills and the reciprocal relationship between cognitive, affective and psychomotor domains and physical motor skills.

Elementary schools are spread throughout Indonesia, not only concentrated in urban areas but have spread to rural areas and even mountainous areas, the existence of elementary schools is almost always at the Kelurahan / Village level, some even have more than one elementary school at the kelurahan level (Hidayat, 2019). Elementary school age is a very decisive period in the possibility of achieving excellent growth and development in the future. Teachers who have professional competence will make careful preparation and planning before carrying out their duties (Haryani, 2022).

Motor development is one of the most important factors in the development of each individual because the basic movements of children will greatly affect the motor abilities of children of later ages (Awwaliyah, 2015). Literacy itself means a person's ability and skills in reading, writing, speaking, problem solving, understand-

ing, analyzing, but along with the times the meaning and scope of literacy has become wider (Wulandari, 2023) (Bungsu, 2021) (Novarina, 2019) (Rohim, 2020) (Adi, 2022) (Kurniawan, 2022). Measuring the level of physical literacy which consists of four test domains namely: Daily Behavior, Physical Competence, Motivation and Confidence, and Knowledge and understanding (Permana, 2020). The development of physical literacy in Indonesia is still limited to concepts and understanding. The author's search in indexed journals only found one relevant article on the study of physical literacy from (Widodo, 2018) mentioned the meaning of physical literacy is when children have developed the skills and confidence to be physically active for life. Until the International Physical Literacy Association (IPLA) emerged which stated that Physical literacy is the motivation, confidence, physical competence, knowledge and understanding to value and take responsibility for engaging in physical activities for life (Tremblay, 2018)

Several organizations from several countries have developed a literacy topic, including Physical Health Education (PHE) in Canada and Sport Australia from Australia, which in recent years has raised the topic of physical literacy which has become the main focus of physical education (Cairney, 2018) (Dutil, 2018). Physical literacy is defined as a description of what individuals are expected to be able to do and develop the motivation, confidence, physical competence, knowledge and understanding that individuals develop to maintain physical activity at a level that is lifelong (Choi, 2018) (Lynch, 2016) (Nyström, 2018).

There are several assessments of physical literacy based on the search, including the Canadian Assessment of Physical Literacy (CAPL) (Longmuir, 2015) (Tremblay, 2016). All of them are measurement tools to assess physical literacy. However, as discussed in this dissertation plan, there has been no development of physical literacy instruments for elementary school-aged children. Referring to (Cairney, 2018) (Dutil, 2018) that these assessments are carried out at the age of preschool to primary school children. Assessment of physical literacy skills in elementary schools is carried out only based on the results of teacher observations, resulting in a mismatch between the scores obtained and the abilities of students (Fathiyati, 2022). Improving students' physical motor skills is implemented through the PJOK learning process (Fathiyati, 2022) (A'la, 2019) (Febrianti, 2021). So that in its implementation, PE learning is more focused on direct

practice, with the aim that students can move and gain a more meaningful learning experience (Wardan, 2021) (Wardan, 2021).

As for the physical literacy test instrument used in Canada, namely The Canadian Assessment of Physical Literacy (CAPL-2) test instrument (Dutil, 2018) (Cairney, 2018). The CAPL-2 instrument contains the domains of motivation & confidence, daily behavior, physical competence, and knowledge & understanding designed to assess children aged 8 to 12 years in Canada (Choi, 2018) (Lynch, 2016) (Nyström, 2018). When viewed from the physical competence domain in CAPL, it combines measures of physical fitness and motor performance. Therefore, both tests have the same purpose, which can be used to measure physical fitness.

Low physical fitness is a serious problem that needs a concrete solution for adolescents (Chaeroni, 2021). It is clear that physical activity (PA) is all movement including during leisure time, for transportation to and from places, or as part of one's work (Chaeroni, 2021). Factors that contribute to PA participation in children and youth include social status, urban or rural location, gender, culture and technology (Nash, 2018). School-related physical activity interventions can reduce anxiety, increase resilience, improve well-being and promote positive mental health in children and adolescents (Andermo, 2020). Physical activity programs before school hours provide children with opportunities to be active can help them accumulate more physical activity and spend less time in sedentary behaviors during the school day, which can lead to increased overall physical activity and associated physical and mental health benefits (Knight, 2015).

## CONCLUSION

In this study, it can be concluded that the level of physical literacy skills of elementary school children according to class teachers and physical education teachers shows good qualification results. With the results according to the class teacher, namely with a value of 4 with a value range of 97.1905 while according to the physical education teacher with a value of 4 with a value range of 106.6; 3 and there is no difference in the average level of physical literacy skills of elementary school-age children according to class teachers and physical education teachers.

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