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The physical literacy level of elementary school students was examined from the motivation and self-confidence domains

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ABSTRACT

Physical education learning in elementary schools has a significant role in developing students' physical literacy. However, physical literacy is not only related to physical abilities, but is also influenced by psychological factors, such as students' motivation and self-confidence in the learning context. This study aims to analyze the domains of motivation and self-confidence using the Canadian Assessment of Physical Literacy (CAPL-2) Questionnaire in elementary school students. The design used in this research is a cross-sectional study design, which aims to collect data at one time (point time approach). The research results obtained that the percentage of motivation and self-confidence scores for elementary school students is as follows: beginning 0%; progressing 16.67%; achieving 33.33%; excelling 50%. The data shows that elementary school students have excellent levels of motivation and self-confidence (excelling category) and have exceeded the recommended physical literacy levels associated with substantial health benefits. In the context of physical education learning in primary schools, strengthening students' motivation and building self-confidence will not only improve their physical skills, but will also help them develop positive attitudes towards physical activity and overall health.

***Keywords**: motivation, self-confidence, physical literacy*

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INTRODUCTION

Education is a key element in the formation of individuals who are competitive in society. In the midst of developments in technology and information, physical literacy has become an important aspect in the education of elementary school age (Rihatno & Nuraini, 2021). Physical literacy not only includes gross and fine motor skills, but also involves understanding physical concepts, body awareness, and the ability to participate in physical activities. International Physical Literacy Association (2017) proposes that physical literacy can be described as the motivation, self-confidence, physical competence, knowledge and understanding to appreciate and take responsibility for involvement in physical activity throughout life. The aim of proposing the concept of physical literacy is based on the importance of describing individual capacities that are realized, so as to enable them to achieve various aspects of their potential to improve the quality of life and humans (Whitehead et al., 2018). Physical literacy also pays important attention to the dimensions of human embodiment that must continue to be fostered,

both during childhood, adolescence, adulthood and into older age (Durden-Myers et al., 2018; Irmansyah et al., 2021).

Physical education learning in elementary schools has a significant role in developing students' physical literacy (Liu et al., 2017). However, physical literacy is not only related to physical abilities, but is also influenced by psychological factors, such as students' motivation and self-confidence in the learning context. Ulstad et al. (2016) explains motivation as one of the things that influences human behavior, as a driving force, desire, support that makes someone enthusiastic so that they can act in a certain way and lead it in an optimal direction. Many factors cause low student motivation to learn, one of which is self-confidence. Self-confidence is a person's attitude of being able to accept reality, have self-awareness, be optimistic, be independent, and have the ability to have everything that one wants (Chen & Wang, 2017).

The results of research from Irmansyah et al. (2020) explains the condition of elementary school physical education learning which is still unable to make a positive contribution to the world of education. This is evidenced by the problems that still arise in the physical education learning process, such as: lack of teacher understanding of the concepts and content of physical education learning; there are still errors and inconsistencies between concepts and physical education learning practices; and there is still a lack of or inadequate learning infrastructure and facilities. These problems have a direct impact on students' low motivation and self-confidence in participating in the learning process. Meanwhile, previous research has shown that high motivation and strong self-confidence can make a positive contribution to learning and improving students' movement skills (Brian et al., 2019; Chen, 2015; Haerens et al., 2013).

Factually, the problem that researchers encountered when conducting observations was that many students were still passive when learning because they were afraid of being laughed at, and were afraid of making mistakes, especially when practicing in the field. This is caused by students' lack of self-confidence and is a significant obstacle in the physical education learning process. Therefore, it is important to carry out this research because by knowing the description of students' levels of motivation and self-confidence, teachers can design physical education learning programs that are more interesting, fun, and challenging (Wallhead et al., 2013). Apart from that, the novelty of this research emphasizes the elaboration of students' motivation and self-confidence domains which is rarely done in previous research. Irmansyah et al. (2020) emphasized that physical education research conducted in Lombok still focuses on experimental or implementation research which focuses on physical and movement

components.

This research provides a valuable contribution to the understanding of the factors that influence students' physical literacy and can be a basis for developing more holistic and effective learning strategies in improving students' physical literacy in elementary schools. Thus, this research not only contributes to the theoretical understanding of physical literacy and the factors that influence it, but also has significant practical relevance in the context of curriculum development and physical education teaching in primary schools, especially in Lombok. Therefore, this research aims to analyze the domains of motivation and self-confidence using the Canadian Assessment of Physical Literacy (CAPL-2) Questionnaire in elementary school students. It is hoped that the results of this research can provide valuable knowledge for educators and policy makers in designing effective learning strategies to increase physical literacy in physical education learning.

METHODS

Research Design

The design used in this research is a cross-sectional study design, which is a research to study the dynamics of the correlation between risk factors and effects, by approaching, observing or collecting data at one time (point time approach) (Sakti et al., 2021). In the context of this research, researchers observed the level of motivation and self-confidence of elementary school students at a certain point in time using the Canadian Assessment of Physical Literacy (CAPL-2) Questionnaire. The use of a cross-sectional study allows researchers to collect data from a number of samples of students from various age groups, backgrounds, and other characteristics at one specific point in time. This allows researchers to get a representative picture of the relationship between the variables studied.

Participants

The population is all subjects/participants/informants used in the research (Armour & Macdonald, 2012). The population in this study is all research participants which include all students in grades IV, V, VI at primary school number 3 Perian, Montong Gading District, East Lombok Regency with a total of 60 students. The results of descriptive analysis on 60 students showed that the average age was 10.08; height 126.27; body weight 32.68; and body mass index 25.88. Furthermore, in this research, sampling used the *total sampling* method. Haegele & Hodge (2015) explained that *total sampling* is a sampling technique where all members of

the population are sampled. Based on this explanation, the sample used in this research was a total of 60 students.

Research Instruments

The instruments used in this research are *Canadian Assessment of Physical Literacy* (*CAPL-2) Questionaire* (Healthy Active Living and Obesity Research Group, 2017). The CAPL-2 was assessed with 12 items in the CAPL-2 self-report questionnaire. Four aspects of motivation and self-confidence were evaluated, and each aspect was assessed through 3 items. For each item, students are given two descriptions of what they like or do, and they are asked to choose the option that is most similar to themselves. Each of the 12 items in the motivation and self-confidence assessment is awarded a maximum of 2.5 points, so the total maximum score for the domain is 30 points. This instrument has been tested for validity and reliability through previous research, showing good validity and reliability values. This instrument is relevant and appropriate to the context of physical education and students in Indonesia (Irmansyah et al., 2023), and has adequate constructive validity with a *Rotated Component Matrix* value above 0.60 and high reliability with an estimated reliability value above 0.7.

Data Collection Procedure

The data collection procedure was carried out by giving questionnaires to students who were the subjects of the research. The questionnaire referred to here is the CAPL-2 Questionnaire which has been tested for validity and reliability according to the explanation in the research instruments section. The first step taken to collect data was to ask students' consent to be involved in filling out the questionnaire. Next, the researcher explained the process of filling out the questionnaire and explained the material from the questionnaire. Students are given 45 minutes to answer all questions/statements in the questionnaire, and are given the opportunity to ask questions if there are points they do not understand. After all the data was collected, the researcher provided feedback to the students to verify the difficulties the students faced when filling out the questionnaire. This is done to minimize students' misperceptions regarding the substance/material in the questionnaire.

Data Analysis

The data analysis technique in this research uses quantitative descriptive data analysis techniques (Tremblay et al., 2018). Quantitative descriptive analysis technique is data analysis by describing or illustrating the data that has been collected as it is without intending to draw conclusions that apply to the general public. In this research, the data analysis process was

carried out with the help of the SPSS program to make it easier for researchers to describe research data.

Table 1. Calculating the Motivation and Confidence Domain Score

Predilection		Adequacy		Intrinsic Motivation		Competence
range	+	range	+	range	+	range
1.8 to 7.5		1.8 to 7.5		1.5 to 7.5		1.5 to 7.5
= Motivation and Confidence domain score (30 points)						

Table 2. Interpreting the Motivation and Confidence Domain Score

	Beginning	**Progressing**	**Achieving**	**Excelling**
Girls				
8 years	< 16.2	16.2 to 22.3	22.4 to 24.8	> 24.8
9 years	< 16.2	16.2 to 22.5	22.6 to 24.8	> 24.8
10 years	< 16.2	16.2 to 22.5	22.6 to 24.8	> 24.8
11 years	< 16.2	16.2 to 22.5	22.6 to 25.0	> 25.0
12 years	< 16.3	16.3 to 22.5	22.6 to 25.0	> 25.0
Boys				
8 years	< 16.3	16.3 to 23.0	23.1 to 25.3	> 25.3
9 years	< 16.7	16.7 to 23.3	23.4 to 25.7	> 25.7
10 years	< 16.8	16.8 to 23.5	23.6 to 26.0	> 26.0
11 years	< 16.8	16.8 to 23.7	23.8 to 26.0	> 26.0
12 years	< 16.8	16.8 to 23.7	23.8 to 26.2	> 26.2

RESULTS AND DISCUSSION

Results

Before showing the descriptive statistical results in this research, the results of the data normality test have first been presented, which aims to determine the distribution of normally distributed research data (See. Table 3).

Table 3. Data Normality Test

Component	**Gender**	**Kolmogorov-Smirnov[a]**			**Shapiro-Wilk**		
		Statistic	**df**	**Sig.**	**Statistic**	**Df**	**Sig.**
Motivation &	Male	.106	29	0.200*	.936	29	0.079
Confidence	Female	.106	31	0.200*	.960	31	0.284

Based on data from Table 3, for men and women it can be said to be normal because the significance value is more than 0.05. The basis for decision making in this normality test is that if the significance value is greater than 0.05 then the research is normally distributed (Yap & Sim, 2011). After the data was normally distributed, the researcher then analyzed the data descriptively and statistically from all participants based on gender (See. Table 4).

Table 4. Descriptive statistics for participants by gender

Component	Gender		Statistic	Std. Error
Motivation & Confidence	Male	Mean	25.2172	.37400
		Median	25.1000	
		Variance	4.056	
		Std. Deviation	2.01407	
		Minimum	22.40	
		Maximum	30.00	
		Range	7.60	
	Female	Mean	25.9548	.30921
		Median	26.1000	
		Variance	2.964	
		Std. Deviation	1.72160	
		Minimum	22.00	
		Maximum	28.50	
		Range	6.50	

The results of descriptive statistical analysis of participants based on gender show that the average (mean) score produced is above the standard assessment category or it can be assumed that students have high motivation and self-confidence. In general, female students have a higher level of motivation compared to male students. After classification based on gender, more specifically the researchers analyzed data from male participants based on age (See. Table 5).

Table 5. Descriptive statistics for male participant by age

Component	Grade		Statistic	Std. Error
Motivation & Confidence Male	9 Grade	Mean	23.8333	.30948
		Median	24.1000	
		Variance	.575	
		Std. Deviation	.75807	
		Minimum	22.90	
		Maximum	24.70	
		Range	1.80	
	10 Grade	Mean	25.5923	.70123
		Median	25.3000	
		Variance	6.392	
		Std. Deviation	2.52833	
		Minimum	22.40	
		Maximum	30.00	
		Range	7.60	
	11 Grade	Mean	25.5600	.46552
		Median	25.9000	
		Variance	2.167	
		Std. Deviation	1.47211	
		Minimum	23.20	
		Maximum	27.10	
		Range	3.90	

After classification based on male gender based on age, researchers analyzed data from female participants based on age (See. Table 6).

Table 6. Descriptive statistics for female participant by age

Component	Grade		Statistic	Std. Error
Motivation & Confidence Female	9 Grade	Mean	25.0300	.61969
		Median	24.8000	
		Variance	3.840	
		Std. Deviation	1.95962	
		Minimum	22.00	
		Maximum	27.60	
		Range	5.60	
	10 Grade	Mean	26.5700	.43667
		Median	26.4000	
		Variance	1.907	
		Std. Deviation	1.38086	
		Minimum	24.60	
		Maximum	28.50	
		Range	3.90	
	11 Grade	Mean	26.2364	.46696
		Median	26.4000	
		Variance	2.399	
		Std. Deviation	1.54872	
		Minimum	23.70	
		Maximum	28.50	
		Range	4.80	

Next, Table 7 explains the percentage value of each CAPL-2 component and its interpretation categories, as follows.

Table 7. Percentage of CAPL-2 components by interpretation category

Component Motivation & Confidence	N	Interpretation Categories			
		[1]Beginning	***[2]Progressing***	***[3]Achieving***	***[4]Excelling***
Male	29	0 (0%)	8 (27.59%)	13 (44.82%)	8 (27.59%)
Female	31	0 (0%)	2 (6.45%)	7 (22.59%)	22 (70.96%)
Total	60	0 (0%)	10 (16.67%)	20 (33.33%)	30 (50%)

The interpretation results from the CAPL-2 category for male students have the following values: beginning 0%; progressing 27.59%; achieving 44.82%; excelling 27.59%; In general, male students have a good level of motivation and self-confidence and fall into the achieving category. The achieving category is a category of students who have reached the recommended level of physical literacy to gain the health benefits of a physically active lifestyle. Meanwhile, female students have the following grades: beginning 0%; progressing 6.45%; achieving 22.59%; excelling 70.96%. In general, female students have a very good level of motivation

and self-confidence and fall into the excelling category. The excelling category is a category of students who have exceeded the recommended level of physical literacy and is associated with substantial health benefits.

Discussion

This research aims to analyze the domains of motivation and self-confidence using the Canadian Assessment of Physical Literacy (CAPL-2) Questionnaire in elementary school students at SDN 3 Perian. Overall, the percentage of motivation and self-confidence scores for elementary school students is as follows: beginning 0%; progressing 16.67%; achieving 33.33%; excelling 50%. The data shows that elementary school students have excellent levels of motivation and self-confidence (excelling category) and have exceeded the recommended physical literacy levels associated with substantial health benefits. Although this research provides a positive description of student motivation and self-confidence, previous research shows that there are several factors that can influence student motivation and self-confidence, such as support from teachers and parents, a conducive school environment, and facilities that support physical activity and sport (Castelli et al., 2015).

The results of this research further strengthen the theory from Cook & Artino (2016) which explains that motivation and self-confidence are very important factors for students, a confident attitude will make students more enthusiastic and active when learning. Therefore, self-confidence is a need for every individual. Students who have high motivation and self-confidence are students who are ready for the dynamics of life at school which are full of challenges (Gil-Arias et al., 2017). Every student must have strong motivation and self-confidence, so that in learning activities at school and at home they obtain optimal results. Student learning motivation can be analogous to fuel to drive an engine (Zhang et al., 2019), so that it can encourage students to behave actively to excel in class. However, it also needs to be emphasized that motivation that is too strong can actually have a negative effect on the effectiveness of students' learning efforts (Behzadnia et al., 2018).

Self-confidence is a characteristic of high hopes for achieving success. This can help students to develop positive emotions, make it easier to concentrate, determine targets, increase effort, focus on match strategy, and maintain momentum (Travers et al., 2015). Students who have high motivation and self-confidence are independent, enthusiastic, confident in their potential, able to work hard, optimistic and dynamic, able to carry out activities effectively, able to control emotions (be calm and not easily nervous), brave, full of responsibility, and able

to bounce back from failure. With a high level of motivation and self-confidence in students, it can lead to more meaningful learning activities and provide direction to learning activities in achieving learning goals (Beni et al., 2017).

CONCLUSION

This research shows that motivation and self-confidence have an important role in determining the level of physical literacy of students in elementary schools. The results of research show that students who have a high level of motivation tend to have a better level of physical literacy, while students with a low level of self-confidence experience obstacles in developing their physical skills. The implication of this research is the need for a holistic approach in teaching physical education in elementary schools. In addition, the findings of this research indicate the need for an individualized (differentiated) approach in teaching. Students with different levels of motivation and self-confidence require learning approaches tailored to their needs and characteristics. It is hoped that future research will emphasize strengthening students' motivation and self-confidence to develop positive attitudes towards physical activity and health which will have an impact on a healthy and active lifestyle in the long term.

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