

## Level of Physical Fitness with Physical Education Learning Outcomes

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**A.** Conception and design of the study; **B.** Acquisition of data; **C.** Analysis and interpretation of data; **D.** Manuscript preparation; **E.** Obtaining funding

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### ABSTRACT

The type of research used is regression research to find out: 1) The level of physical fitness of students at SD Negeri Sudirman I Makassar; and 2) The contribution of physical fitness to physical education learning outcomes for students at SD Negeri Sudirman I Makassar. The population of this study was all students at SD Negeri Sudirman I Makassar in grades III, IV, and V, specifically male students, with a sample size of 40 students. The sampling technique is random sampling. The data analysis techniques used are descriptive analysis, data normality test, data linearity test, regression test, and categorization test using the SPSS 20.0 program at a significance level of  $\alpha 0.05$ . The results of this research show that: 1) The level of physical fitness of students at SD Negeri Sudirman I Makassar is in the Medium category or 72.5%; and 2) Physical fitness has a significant contribution to physical education learning outcomes for students at SD Negeri Sudirman I Makassar, amounting to 69.2%.

**Keywords:** Physical Freshness; Learning Outcomes; Physical Education

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### INTRODUCTION

Science has now developed very rapidly, thereby encouraging public awareness of the importance of health and people are more aware of the importance of exercise for health (Bangun & Yunis, 2016). In reality, there are four basic human goals for carrying out sports activities. First, those who do sports activities for recreational purposes. Second, those who do sports activities for education. Third, those who carry out sports activities to achieve a certain level of physical fitness. Fourth, those who carry out certain sports activities to achieve optimal performance (Irfan, 2019). Among the various goals and objectives of sports activities above, one of them is to achieve a level of physical fitness (Jayul & Irwanto, 2020). This means that sports activities are not just to achieve certain achievements, but

are aimed at maintaining a person's physical health or physical fitness (Komarudin & Prabowo, 2020).

Physical fitness is a person's ability to do hard daily work easily without feeling tired (Bangun & Yunis, 2016) and still have energy remaining or reserves to enjoy free time or for needs that can be used at any time (Sahabuddin et al., 2020). Thus, physical freshness is a manifestation of a person's functional loyalty to carrying out a certain job with good or satisfying results without significant fatigue (Hidayatullah & Anwar, 2020).

Physical education is an educational process that utilizes systematically planned physical activities aimed at developing and improving individuals organically, neuromuscularly, perceptually, cognitively, and emotionally within the framework of the national education system (Rokhayati et al., 2016). Physical education is a physical activity organized to become a medium for educational activities. Education is an activity that is a process for developing spiritual abilities and attitudes which include mental, intellectual, and even spiritual aspects (Haris, 2018). Physical education treats children as a complete unit, a total being, rather than just considering them as someone with separate physical and mental qualities (Sahabuddin et al., 2022).

Physical education is a medium for encouraging the development of motor skills, physical abilities, knowledge, reasoning, appreciation of values (mental-emotional-spiritual-social attitudes) (Taufan et al., 2018), and the habit of healthy lifestyles which lead to stimulating growth and development of balanced (Bismar & Sahabuddin, 2019). With physical education, elementary school children will obtain various expressions that are closely related to pleasant personal impressions as well as various expressions that are creative, innovative, skilled, have physical fitness, healthy living habits, and have knowledge and understanding of human movement (Yuniartik et al., 2017).

Increasing physical fitness in schools needs to be fostered to support the achievement of optimal teaching and learning processes because students who have good physical fitness will be able to carry out learning tasks well, that physical fitness or good physical condition for students will function to increase learning ability and safety. (Prasetyo et al., 2019). Therefore, it is possible that having poor physical fitness will affect the physical appearance and thoughts of elementary school children who are not ready or unable to accept the workload in the form of learning activities, which is an obligation for students every day (Jayul & Irwanto, 2020). Apart from that, elementary school children who have good physical fitness still have remaining energy that can be used to fill their free time.

Based on the function of physical fitness for students, physical fitness will provide benefits for educational purposes (Gede Yogi Saputra, 2021), because the higher a person's level of physical fitness, the higher their passion for learning, so with great passion for learning they will be able to achieve national education goals considering the importance of physical fitness for students, which in itself cannot be separated from the factors that influence physical fitness including food and nutrition, sleep and rest, exercise and exercise, healthy living habits and environmental factors (Rozi et al., 2021).

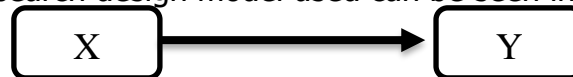
Physical education has a very important role in intensifying the implementation of education as a process of human development that lasts a lifetime (Taqwim et al., 2020). Physical education provides opportunities for students to be directly involved in various learning experiences through physical activities, playing, and exercising which are carried out systematically, directed, and planned (Hudah et al., 2020). The provision of learning experiences is directed at developing and forming a healthy and active lifestyle throughout life (Saleh & Malinta, 2020).

SD Negeri Sudirman I Makassar is one of the schools that is popular with students in the area. The surrounding environment as a place to live has a significant influence on

maintaining and improving physical fitness. SD Negeri Sudirman I Makassar is in the Kota area. The school has many students who come every day to study. Children's economic levels also vary, because their parents work as entrepreneurs, traders, officers and employees.

## METHODS

The method used in this research is the regression method which is supported by a quantitative approach, to the problem being studied, namely regarding ongoing events or incidents. The simple research design model used can be seen in Figure 1 below.



**Figure 1.**  
 Research design model

The population in this study were all male students at SD Negeri Sudirman I Makassar classes III, VI, and V with a total population of 120 students. Thus, the sample used in this research was 40 male students at SD Negeri Sudirman I Makassar, with the sampling technique being random sampling or a random system.

**Table 1.**  
 Physical fitness assessment aged 6 – 9 years

Value	Run 30 meters	Hanging body lift	Sit Ups	Jump upright	Run 600 meters	Value
5	S.d – 5,5"	40" <	17 <	38 <	s.d – 2'39"	5
4	5,6" – 6,1"	22" – 39"	13 – 16	30 – 37	2'40" – 3'00"	4
3	6,2" – 6,9"	9" – 21"	7 – 12	22 – 29	3'01" – 3'45"	3
2	7,0" – 8,6"	3" – 8"	2 – 6	13 – 21	3'46" – 4'48"	2
1	8,7"- dst	0" – 2"	0 – 1	0 – 12	4'49" - dst	1

**Table 2.**  
 Norms for assessing physical fitness

No	Number of values	Physical Fitness Classification
1.	22 – 25	Very good
2.	18 – 21	Good
3.	14 – 17	Medium
4.	10 – 13	Less
5.	05 – 09	Very little

To find out about the learning outcomes of Physical Education, Sports, and Health, researchers took the daily test scores of students in grades III, IV, and V for the odd semester of the 2021/2022 academic year. Daily test scores are obtained for 1 semester as a result of the accumulation of all physical education, sports, and health subject matter that has been studied during one semester. The guidelines used to get grades are the K13 curriculum assessment guidelines where there are three domain aspects assessed, namely: attitude assessment (affective), knowledge assessment (cognitive), and skills assessment (psychomotor). To assess attitudes, use letter predicates, which start from:

**Table 3.**  
 Assessment of K13 physical education learning outcomes

No.	Category	Affective	Cognitive	Psychomotor
1	Very well	A	100	100

2	Good	B	80 – 99	80 – 99
3	Enough	C	65 – 79	65 – 79
4	Not enough	D	< 65	< 65

After all research data has been collected, namely data on levels of physical fitness and physical education learning outcomes for students at SDN 156 Tamalallang, Maros Regency, then to test the hypothesis proposed in this research, the collected data needs to be analyzed statistically, descriptively and inferentially for hypothesis testing purposes. study. So the overall statistical data analysis used generally uses analysis with the SPSS version 20.00 program application with a significance level of 95% or  $\alpha=0.05$ .

## RESULTS AND DISCUSSION

### Result

**Table 4.**  
Results of descriptive analysis for each variable

	N	Sum	Mean	Stdv	Variance	Range	Min.	Max.
Physical fitness	40	616,00	15,4000	1,89195	3,579	9,00	12,00	21,00
Physical education learning outcomes	40	3400,00	85,0000	3,04665	9,282	13,00	79,00	92,00

**Table 5.**  
Normality test results for each variable

Variable	K – SZ	P	$\alpha$	Information
Physical fitness	0,126	0,113	0,05	Normal
Physical education learning outcomes	0,100	0,200	0,05	Normal

**Table 6.**  
Linearity test results

	Definition From Linearity (F)	Sig	Conclusion
Physical fitness with physical education learning outcomes	0,758	0,626	Linear

**Table 7.**  
Recapitulation of the percentage of physical fitness results

No.	Interval	Frequency	Persen	Classification
1	22 – 25	0	0,0%	Very good
2	18 – 21	6	15,0%	Good
3	14 – 17	29	72,5%	Medium
4	10 – 13	5	12,5%	Less
5	5 – 9	0	0,0%	Very little
<b>Amount</b>		<b>40</b>	<b>100%</b>	<b>-</b>

Based on Table 7 above, it appears that the percentage of physical fitness level data results for students at SD Negeri Sudirman I Makassar out of 40 (100%) students, the very good category is 0 students or (0.0%), the good category is 6 students or (15.0%), the moderate category was 29 students or (72.5%), the less than 5 students or (12.5%), and the very low category was 0 students or (0.0%). Thus, it can be concluded that the percentage of final data results on the level of physical fitness for students at SD Negeri Sudirman I Makassar is in the Medium category.

### The relationship between physical fitness and physical education learning outcomes

Regression analysis was carried out to determine the contribution of the independent variable to the dependent variable. The regression analysis used is simple regression analysis at 95% or  $\alpha 0.05$ . The complete results of the regression analysis can be seen in the attachment. This is intended to determine the contribution of physical fitness to physical education learning outcomes for students at SD Negeri Sudirman I Makassar obtained according to the summary of **Table 8** below:

**Table 8.**  
 Regression analysis results

VARIABLE	N	R	R <sup>2</sup>	F	t	P	$\alpha$
Physical fitness (X) Physical education learning outcomes (Y)	40	0,832	0,692	85,366	9,239	0,000	0,05

Based on the test results as shown in **Table 8**, the regression equation is:

$$Y = a + bX$$

$$Y = 64,371 + 1,340 X$$

So what is contained in the regression equation can be explained as follows:

- The constant of 64.371 states that if physical fitness does not change, then the physical education learning outcomes for students at SD Negeri Sudirman I Makassar will be 64.371.
- The regression coefficient for the physical fitness variable of 1.340 states that every additional one percent (1%) of the physical fitness variable will cause an increase in physical education learning outcomes for 1,340 students at SD Negeri Sudirman I Makassar.

There is a contribution of physical fitness to physical education learning outcomes for students at SD Negeri Sudirman I Makassar. Based on the results of regression analysis testing of physical fitness data on physical education learning outcomes in **Table 8**, a regression value of 0.832 was obtained with a significance level of  $0.000 < \alpha 0.05$ , for a coefficient of determination of 0.692. This means a 69.2% contribution of physical fitness to physical education learning outcomes for students at SD Negeri Sudirman I Makassar. Based on the results of this analysis, it can be seen that the t-count value obtained is 9.239 which can be seen in the table above with a significance level of  $0.000 < \alpha 0.05$ . So  $H_0$  is rejected and  $H_1$  is accepted or the regression coefficient is significant, or physical fitness has a significant influence on physical education learning outcomes for students at SD Negeri Sudirman I Makassar. Thus, there is a contribution of physical fitness to physical education learning outcomes for students at SD Negeri Sudirman I Makassar of 69.2%. Testing of the regression model shows an F value of 85.366 with a significant level of  $0.000 < \alpha 0.05$ . This means that physical education learning outcomes can be explained significantly by the physical fitness of students at SD Negeri Sudirman I Makassar.

## Discussion

### Physical fitness during the Covid-19 pandemic in students at SD Negeri Sudirman I Makassar

Percentage of physical fitness level data results for students at SD Negeri Sudirman I Makassar out of 40 (100%) students, 0 students in the very good category or (0.0%), 6 students in the good category or (15.0%), medium category there were 29 students or (72.5%), the less than 5 students or (12.5%), and the very less category had 0 students or (0.0%). Thus, it can be concluded that the percentage of final data results on the level of physical fitness for students at SD Negeri Sudirman I Makassar is in the Medium category.



Measurement of the level of physical fitness was carried out using five test items, namely the 40-meter running test, hanging body lift test/sit-ups, lying down test/30-second sit-ups, upright jumping test/vertical jump and 600-meter running. Each result of the five test items is given a value according to the predetermined assessment classification, namely 5 points for very good classification, 4 points for good classification, 3 points for moderate classification, 2 points for poor classification and 1 value for very poor classification. Measurement of the level of physical fitness is carried out by calculating the total score of the five test items and consulting with the determined assessment norms. Based on the description above, the physical fitness of students at SD Negeri Sudirman I Makassar needs to be improved. These results will certainly influence the learning outcomes of physical education and health which will also affect the ability of female students to carry out sports techniques and daily activities.

The results of the data obtained were that there were 6 students in the good category, these students had a level of physical fitness above average because these students always carried out daily work activities, namely helping their parents with work in the fields and also when they were finished helping parents then the student immediately plays with his friends. While in the medium category, there are 29 students, these students are almost the same as the activities carried out by their peers, namely they always carry out daily work activities, namely helping their parents in doing work in the fields and also when they have finished helping their parents, the students immediately play with their friends. -her friend. Even if they have free time, the students immediately engage in play activities with their peers. Meanwhile, there are 5 students in the poor category, because these students only do play activities and the parents always forbid their children to do activities outside the home because of the Covid-19 pandemic. So these students only do activities in their rooms, mostly using cell phones or playing games. what he did.

The level of physical fitness is also a factor that influences students in carrying out daily activities in the form of learning activities, sports activities and other activities carried out by students. With a fit body, students become more motivated to carry out every activity they do both at school and at home. Physical fitness is the condition of the body which is related to a person's ability and ability to carry out an activity using strength, creativity and endurance efficiently without causing significant fatigue. Based on the description above, the level of physical fitness for students at SD Negeri Sudirman I Makassar must be improved to support the smooth running of Physical Education and Health learning at the elementary school. Apart from that, of course, increasing physical fitness will also improve the quality of student learning, both in Physical Education and Health learning activities and in other learning activities.

### **Contribution of physical fitness to physical education learning outcomes for students at SD Negeri Sudirman I Makassar**

The results of statistical analysis show that there is a significant contribution of physical fitness to physical education learning outcomes for students at SD Negeri Sudirman I Makassar with a correlation value of 0.832 with a significance level of  $0.000 < \alpha 0.05$ . If the results of this research are linked to the underlying theory and framework of thought, then basically the research results support and strengthen existing theories and previous research results. This proves that physical fitness supports physical education learning outcomes. However, students at SD Negeri Sudirman I Makassar have normal physical fitness to support physical education learning outcomes. Physical fitness is one of the factors that supports achieving physical education learning outcomes. So, the function of physical fitness on physical education learning outcomes is that if a student has less physical fitness



then the student will definitely never do physical activity that can improve their physical fitness so that the learning outcomes obtained will decrease also nowadays, most students only do activities at home resulting in students These students rarely do sports activities outside the home and students are now better off playing games than doing activities outside the home, and also students who have less physical fitness mostly only do activities at home, rarely doing activities outside the home so that it affects their physical education learning outcomes while students who have moderate physical fitness because these students carry out activities helping their parents work in the fields so they usually have good physical education learning outcomes. If physical fitness is not good, the student's physical education learning outcomes will also decrease. Thus, physical fitness has a significant contribution to the physical education learning outcomes of students at SD Negeri Sudirman I Makassar.

## CONCLUSION

Based on the research results and discussions that have been presented, the following conclusions can be drawn:

1. The physical fitness of students at SD Negeri Sudirman I Makassar is in the Medium category.
2. Physical fitness has a significant contribution to physical education learning outcomes for students at SD Negeri Sudirman I Makassar.

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