



## **Correlation Between Physical Fitness With Emotional Intelligence Of Primary School Children**

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**Abstract:** This study aims to find out the correlation between the level of physical fitness and the emotional intelligence of primary school children. This study used correlational analytical design with cross-sectional approach samples of 93 students of 4-6 grade from one of the primary school in Bandung. The instrument used are the Indonesian fitness test for 10-12 years old and the emotional intelligence questioner. The tests conducted in this study are Cross Sectional and Spearman tests. The results of the research showed that there is a correlation between the level of physical fitness with emotional intelligence. The correlation coefficient is 0,778, it means physical fitness has a significant correlation with emotional intelligence of the primary students.

**Keywords:** Physical Fitness; Emotional Intelligence

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### **INTRODUCTION**

Learning is a process of change from ignorance to knowledge and occurs within a certain period of time. Learning can also produce change in one's self. The process of learning in the individual is very important, because through learning the individual can understand his environment and adapt to the environment around him (Hanafy dkk., 2014).

Physical education has the aim not only to develop the physical realm alone, but also to expand aspects of health, physical fitness, critical thinking skills, emotional stability, social freedom, reasoning, and moral action through physical activity. As a medium to promote motor development, physical abilities, knowledge, enhancement of values, as well as the development of a healthy lifestyle, physical education has a very positive impact on the overall development of students (Karisman & Pasundan, 2020).

One of the main goals of physical education is to develop physical fitness and emotional stability. It should be remembered that physical fitness is not just about physical condition, but also the primary capital for a person to be able to perform physical activity repeatedly over a relatively long period of time without feeling significant fatigue. By having good physical fitness, one is expected to be able to work productively and efficiently, not easily sick, learn with enthusiasm, optimum performance, and improve his overall emotional intelligence (Anggraini, 2019).

In general, physical fitness can be understood as the ability of a person to perform daily work efficiently without causing excessive exhaustion so that he can still enjoy his free time (Sari, 2020). In order to maintain physical fitness, students are required to maintain their fitness by exercising regularly and being balanced with healthy lifestyles such as adequate nutrition, adequate rest and so on. The importance of fitness for humans is because the factors are very supportive of the results of the activity that must be maintained, to maintain fitness is required to regulate the pattern of regular activity so that it can be maximized for day-to-day activity (Widiastuti, 2019). Elementary school students have a high activity requirement in everyday life so physical fitness for elementary school pupils is very beneficial for students (Ma'arif & Prasetyo, 2021). Physical fitness for the development of children of primary school age is very necessary, because the primary age is a time when children grow and develop very quickly, both physically and spiritually. Children of primary school age have a high level of activity in everyday life. So physical fitness for elementary school children is beneficial for students to: 1) improve playing activity, 2) increase inward motivation of students (intrinsic), 3) increase the spirit of learning and practicing, and 4) improve the personal health of students (Wirnantika dkk., 2017).

Emotional intelligence is the ability of a person to regulate his or her emotional life intelligently, maintain emotional harmony and express it, through self-awareness skills, self-control, self motivation, empathy and social skills. The role of a person's intelligence in regulating his emotional life in success is the development of creativity and initiative to carry out daily activities. Physical fitness and emotional intelligence are two important aspects of a person's development holistically, by having good physical fitness, one can complete daily tasks efficiently and without causing significant fatigue. By having good emotional intelligence, individuals can recognize and manage emotions well so that they can interact with others positively and build healthy interpersonal relationships. Both these aspects are important to be enhanced through physical education and education as a whole so that individuals can develop their potential optimally (Arifin, 2018).

However, many parents today focus only on their child's intellectual intelligence, while emotional intelligence (EQ) is often ignored. In physical learning, students' emotional intelligence is also important to note because students who have a high EQ are more likely to their goals and control themselves. A teacher must be able to pay attention to the factors that influence the student, whether it's physical fitness or emotional intelligence. EQ skills are not comparable to IQ skills or cognitive skills, but both interact dynamically, both conceptually and in the real world. Besides, the EQ is not so influenced by hereditary factors (Fatah, 2016). This is because behavioral changes can occur under various circumstances, according to the explanation of educational and psychological experts (Karisman & Pasundan, 2020). Many students are unable to control their emotions when playing with peers, such as recognizing their own emotions, managing empathy, motivating themselves, and building relationships, self-interesting it is still a habit or attribute that is still inherent to the student because of the lack of level of emotional intelligence seen when students socialize in the school environment and one of the factors that causes it is because of a low physical fitness of a person so that it can be concluded as a result of low fitness physical badness such things can lower the level of emotionally brightness of someone.

Therefore, the study was designed to look at how much the physical fitness level is linked to the emotional intelligence of elementary schoolchildren. With the aim of seeing how much the relationship between the level of physical fitness and emotional

intelligence in elementary schoolchildren has not been studied before so it is an addition of science in physical education especially in primary school.

## **METHOD**

This study uses correlational analytical designs to analyze relationships between variables using cross-sectoral research designs, where each variable is observed at the same time. Analytical research is a study that aims to find the relationship between one variable and the other variable (Notoatmodjo, 2013), The study was conducted by students and pupils of the state primary school in the fourth and sixth grade, and the sixth in the town of Bandung, Population and sample of 93 people, Sampling techniques using total samples, data measurement techniques using Indonesian physical fitness tests and emotional intelligence lifts, data analysis techniques using spss software by meeting correlation analysis prerequisite tests such as normality tests, linearity tests and hypothesis tests.

## **RESULT AND DISCUSSION**

### **Result**

This research data was obtained from all students and pupils of classes IV, V, VI of State Primary Schools in the city of Bandung as research subjects and is the population on this study. In this data description will be dealt with free variable data (X) which is physical fitness and bound variable (Y) that is emotional intelligence.

**Table. 1.** Descriptive Physical Fitness and Emotional Intellegence

<b>Interval</b>	<b>Frequency</b>	<b>Percentage</b>	<b>Category</b>
> 17,78	22	23,66	High
14,99 - 17,78	62	66,67	Medium
<14,99	9	9,67	Low
Total	93	100	

This table shows that the spread of physical fitness levels obtained by the students was 9 (9.67%) in the lower category, 62 (66.67%) are in the middle category, and 22 (23.66%) are at the high category.

**Table. 2.** Descriptive Emotional Intellegence

<b>Interval</b>	<b>Frequency</b>	<b>Percentage</b>	<b>Category</b>
> 122,42	13	13,98	High
99,66 - 122,42	71	76,34	Medium
<99,66	9	9,68	Low
Total		100	

The above table shows the frequency of emotional intelligence of nine students (9.68%) in the lower category, 71 (76.34%) in middle category, and 13 (13.98%) in high category.

**Table 3.** Normality Test

No	Variabel	Sig.K.S	Level Sig. (5%)	Description
1	Emotional Intelligence (Y)	0,039	0,05	Normal

From the test results above, the emotional intelligence significance value was 0.039. The significance value is  $0.039 < 0.05$ , so the assumption of the normality of Emotional Intelligence is fulfilled.

**Tabel. 4.** Linearity Test

	Count F	Sig. F	Level Sig.	Description
(X) (Y)	.83	.987	0,05	Linier

The relationship can be said to be linear if  $F_{count} > F_{table}$  is obtained.  $F_{hitung}$  is 0.987 and  $F_{table}$  or the significance level is 0.05, so the relationship between the two variables is said to be linear.

**Table. 5.** Hipotesis Test

	TotalX	Total Y
Spearman's rho	Correlation Coefficient	1.000
	Sig. (2-tailed)	.778**
	N	93
TotalY	Correlation Coefficient	1.000
	Sig. (2-tailed)	.778**
	N	93

\*\*. Correlation is significant at the 0.01 level (2-tailed).

From the results of the consultation, it was revealed that  $r_{hitung}$  (0,778) >  $r_{table}$  (0,2039), which means that there is a significant relationship between the level of physical fitness and the emotional intelligence of schoolchildren with a correlation value of 0.778. Based on the results obtained, it can be stated that the working hypothesis ( $H_a$ ) is "the relationship between the level of physical fitness and the emotional intelligence of elementary schoolchildren".

Analysis tests between physical fitness levels and emotional intelligence using cross-sectional tests.

**Table. 6.** Cross sectional Test

		Emotional Intelligence				
			High	Middle	Low	Total
Physical Fitness	High	Count %	9 40.9%	13 59.1%	0 0.0%	22 100.0%
	Middle	Count %	4 6.5%	54 87.1%	4 6.5%	62 100.0%
	Low	Count %	0 0.0%	4 44.4%	5 55.6%	9 100.0%
Total		Count %	13 14.0%	71 76.3%	9 9.7%	93 100.0%

The data table showed a total of 93 students and students responding. Respondents with high physical fitness were 22 (14,0%), moderate physical fitness was 62 (76,3%) while respondents with low fitness were 9 (9,7%).

Respondents with high physical fitness with high emotional intelligence were also nine (40.9%), and respondents with higher physical fitness and Emotional Intelligence were an average of 13 (59.1%). Respondents with moderate physical fitness were 4 people with high emotional intelligence (6.5%) and respondents with medium Jasmanian fitness (8.7%) were 54 people, while those with medium jasmian intelligence were 6 people (6.5%). Respondents with low physical fitness with high emotional intelligence were 0 or (0.0%), and respondents with lower physical fitness and physical intelligence averaged 4 (44.4%), while respondents With high physical fitness who had low emotional brightness were 5 (55.6%).

The results of the analysis using a chi-square test between physical fitness and emotional intelligence showed a significant relationship between the two variables. This study aims to identify the differences that occur between the two variables. Based on subgroup analysis, it was found that participation in aerobic exercise for 30-60 minutes in 12-year-olds had a more significant intervention effect on positive emotions. Regular physical exercise can help boost emotional intelligence in children (Li dkk., 2017). Regular physical exercise can help improve emotional regulation, emotional recognition and emotional expression in children. It also shows that the mood of children and adolescents engaged in physical activity increased significantly compared to those who did not participate in physical activities. Age, type of exercise, and duration of adolescent exercise are important factors that influence the positive emotions resulting from intervention of physical activity. Other factors that influenced the relationship between the two variables in this study also concluded that regular physical exercise, such as karate, can help improve emotional intelligence in children. By improving their ability to regulate, recognize, and express emotions, children can develop better social skills and

social interaction. This is done with factors that influence the relationship between the two based on the time the student engages in physical activity, the more students engage in various physical activities then he can manage his emotions (Alesi dkk., 2014). Gender also has a relationship with the emotional intelligence of the student, which means that the physical and emotional intellect of the child are closely related and that the level of differences in physical fitness based on gender is also a factor that affects the relationship between the two variables (Fadlilah dkk., 2022). With this, the level of physical fitness and emotional intelligence in elementary schoolchildren suggests that there is a correlation between the physical and psychological aspects of the child. A good level of physical fitness can make a positive contribution to healthy and adaptive emotional development in a child. By having better physical fitness, children can have better mental and physical strength to cope with challenges and stress in everyday life. If a person is not physically active, has a good nutritional intake and a poor quality of sleep then it will have a great impact on the physical fitness of the person also has an impact on his emotional intelligence It's also possible to imagine when someone's sleep deprived his body will be sluggish and when someone gives something that is considered to be hard then he will be very easy to be angry or emotional (I Isrofik, 2018). Regular exercise will also suppress epinephrine and cortisol levels. Cortisol has a negative effect on the immune system, because cortisol will suppress the blood circulation of the T-cells produced by the thymus glands and the B-cell produced in the spinal cord. Both of these cells are responsible for the immune system and protect the body from bacteria, viruses or infections that can cause disease (Alamsyah dkk., 2017).

An increase in the hormone epinephrine can affect the sympathetic nerve, the effects caused such as increasing blood pressure, increasing the concentration of glucose in the blood, increased mental activity, a person experiencing stress is recommended to reduce the factors that can cause stress by controlling emotions, because controlling the emotions itself affects the production of hormone cortisol becomes normal (Rahmawati & Puspasari, 2021).

Thus it can be concluded that a person will not experience stress if we do physical activity in order to maintain physical fitness so that have a high emotional intelligence as well as to get a manfaat for the survival of his next life, in the hope not only his physical appearance fit, our emotionally intelligent our attitude and actions should also be good. Because psychologically, a strong foundation for an individual's psychological condition is a healthy and nutritious diet, adequate rest time and good physical fitness. To do that, physical activity is structured and consistently able to boost his emotional intelligence also directly (Alamsyah dkk., 2017).

## **CONCLUSION**

Based on the analysis of research data and discussions done in the previous chapter, it can be concluded that there is a positive relationship between the level of physical fitness and emotional intelligence of elementary schoolchildren. This can be proven based on the correlation test results between variables X and Y obtained a score of 0.778. Obviously that  $r_{xy} > r_{table}$ . The correlation coefficient shows a score of 0.778 so it can be said that the relationship between the variables X and Y is quite high. These results indicate a significant correlation and suggest that the higher the level of physical fitness, the higher is the emotional intelligence of elementary schoolchildren. This is not apart from other factors that influence such as exercise, physical activity, balanced nutritional intake and good sleep patterns that always have an impact both directly and indirectly. Therefore, it is very important for a person to have a routine exercise to

maintain his physical fitness because over time the emotional intelligence of the child also increases and obtains good results for his future survival. Thus the hypothesis that sounded there was a connection between the level of physical fitness and the emotional intelligence of the elementary school children received its truth.

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### **CONFLICT OF INTEREST**

Clearly explain whether there are any conflicts of interest related to the reported research.

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