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The Relationship Between Sport Education Model And Motivation Towards Physical Education Learning Outcomes

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Abstract

The purpose of this study was to determine whether there is a relationship between the sport education model and motivation on the learning outcomes of Physical Education. This study used correlational research. The population of all students of Cijaralang 2 Elementary School with a total of 180 students consisting of grades I to VI, the sampling technique used Cluster Random sampling, and the research sample was 51 students of grade V of Cijaralang 2 Elementary School. The research instruments used in this study were questionnaires to measure the sport education model, questionnaires to measure motivation and documentation to measure physical education learning outcomes. Research Results There is a positive and significant relationship between the Sport Education Model and motivation on the learning outcomes of physical education students of Cijaralang 2 Elementary School, this is indicated by the calculated F value> F table (228.753> 2.37) and a sig value of 0.000 <0.05. While the correlation value is 0.895. This relationship can be interpreted that the better the sport education model and motivation possessed by students, the higher the chances of students getting optimal physical education learning outcomes..

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INTRODUCTION

Physical Education, Sports, and Health (PJOK) has a very important role in the physical, mental, and social development of students (Akhmad Sobarna, 2018). Through PJOK, students are not only trained to have good physical skills, but are also taught to maintain physical health, participate in social activities, and develop motor and cognitive abilities (Hayudi et al., 2024). Therefore, success in learning PJOK is greatly influenced by the learning methods used.

Sport Education Model (SEM) is one of the learning approaches that has been proven effective in increasing student engagement in sports activities (Perlman, 2014). SEM is designed to provide students with the opportunity to learn about sports through more in-depth and authentic practical experiences. This model involves several key elements, such as:

a) Active role of students in planning, implementing, and evaluating sports activities.
b) Full participation in various aspects of sports, such as training, competition, and leadership.
c) Development of social values such as cooperation, responsibility, and sportsmanship.

This approach can improve the quality of PJOK learning because it gives students the opportunity to feel a greater role in the learning process, both in terms of skills and social aspects. Motivation that drives people to want to learn is called motivation (Lesmana, 2023). From the previous explanation regarding learning and motivation, it can be concluded that motivation is a drive that makes someone want to learn. (Hamzah B, 2018) states that motivation is an internal and external drive in students who are learning to make changes in behavior, generally with several indicators or supporting elements. (Sardiman., 2016) states that with diligent effort and especially based on motivation, someone who learns will be able to produce good achievements. Motivation is an important factor that influences student learning success. (Ramadan, 2017) In the context of PJOK, motivation can be divided into two types :

a) Intrinsic motivation, which comes from within the student, for example a liking for sports or a challenge to improve skills.
b) Extrinsic motivation, which comes from external factors such as rewards, recognition, or encouragement from teachers and friends.

High motivation will increase student involvement in learning, which in turn will have an impact on the quality and outcomes of their learning. Therefore, learning strategies that can increase motivation are very important to achieve optimal learning outcomes.

The combination of SEM approach and student motivation can have a significant impact on PJOK learning outcomes. SEM, with its emphasis on students' active participation and role in sports activities, can increase their intrinsic motivation. For example, students who are directly involved in competitions or are part of a team that has certain responsibilities will feel more motivated to learn and practice better.

In addition, SEM also creates a learning environment that supports the development of extrinsic motivation, for example through awards for achievements or recognition of student efforts. This will lead to improved learning outcomes, both in terms of physical skills, theoretical knowledge, and social development..

Physical Education learning outcomes are not only measured in terms of improving students' physical skills, but also from the extent to which students develop an understanding of the principles of sports, health, and the ability to work together in a team. SEM that can improve students' intrinsic and extrinsic motivation has the potential to encourage better learning outcomes in these aspects. Although SEM and motivation have great potential in improving physical education learning outcomes, several problems are often encountered in their implementation, including :

a) Not all teachers have a deep understanding of the application of SEM in learning.
b) Lack of adequate facilities and means to support sports activities.
c) Disinterest of some students in physical activities, which can be caused by various factors, including bad experiences in the past or lack of motivation.

Based on the explanation of the problem above, the researcher wants to conduct research with the title "The Relationship between Sport Education Model and Motivation on Physical Education Learning Outcomes".

METHODS

The research method uses a quantitative descriptive method with a correlational approach. Correlational is used to find the relationship between variables. In this study there are three independent variables, namely Sport education model (X1), Motivation (X2) and one dependent variable, namely Physical education learning outcomes (Y). This means that the type of correlation is a double correlation or multiple correlation. In this case (Tangkudung et al., 2018) said that the use of a multiple correlation model is used if the independent variables of the study are theoretically believed to be independent or there are no intervening variables between the independent variables. The research design is as follows :

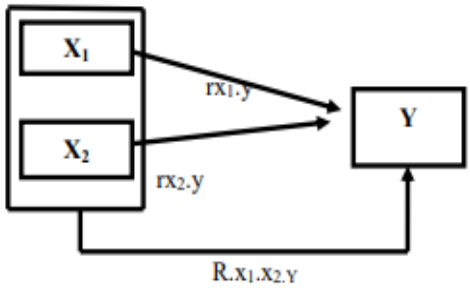

Figure 3.1. Research Design
Source: (Tangkudung et al., 2018)

Description:
X1 : Sport education model
X2 : Motivation
Y : Learning Outcomes.

Participants

According to (Sugiyono, 2017) population is a generalization area consisting of objects or subjects that have certain quantities and characteristics determined by researchers to be studied and then concluded. The same thing according to (Suharsimi Arikunto, 2016) population is the entire research subject. Meanwhile, according to (Zriah, 2017), population is all data that is of concern to researchers in a certain scope and time. The population in this study were all students of Cijaralang 2 Elementary School with a total of 180 students consisting of grades I to VI.

Sampling Procedures

According to (Sugiyono, 2017) a sample is a portion of the number and characteristics possessed by a population. The sampling technique in this study used the Cluster Random Sampling technique. So the research sample consisted of 51 fifth grade students of Cijaralang 2 Elementary School.

Materials and Apparatus

a. Sport Education Model Instrument

The instrument in this study was a questionnaire that can be used to measure students' attitudes towards their participation in sports activities, their understanding of team roles, their motivation, and teachers' opinions regarding classroom management.

Table 3.1 Sport education model questionnaire grid

Variables	Indicator	Question items
Sports Education Model	Attitudes towards Participation in Sports Activities	3
	Understanding Team Roles	3
	Motivation to Participate	3
	in Classroom Management and Learning	4
Amount		13

b. Motivational Instruments

The instrument in this study was using a motivation scale test. The use of a motivation scale was carried out to obtain data on student motivation in physical education subjects. The compilation of the motivation scale in this study was based on motivation indicators according to (Hamzah B, 2018).

c. Physical Education Learning Outcome Instrument

The results of learning physical education, sports and health are the final results of students' abilities in participating in physical education, sports and health. The instrument used is using documentation obtained from the results of obtaining physical education scores in the odd semester. From the documentation of physical education subject teachers in the form of average scores from the material that has been taught in the odd semester, after which it is copied to the documentation sheet that has been prepared.

Design or Data Analysis

The data analysis technique uses multiple correlation techniques. The data will be processed and analyzed after obtaining scores from the test results on each variable, namely the questionnaire test on the Sport Education Model (X1), the Learning Motivation questionnaire test (X2) and Learning Outcomes (Y).

The steps taken in processing and analyzing data in this study are as follows :

1) Distributing test result values
2) Calculating the average value and standard deviation of each test.
3) Conducting analysis requirement testing, namely in the form of normality testing with the help of the SPSS 20 program.
4) Conducting hypothesis testing, namely in the form of simple and multiple regression linearity tests, simple and multiple correlations and linear regression tests at a significance level of $\alpha = 0.05$, as well as calculating the determination index and partial correlation.

RESULT

1. Sport Education Model

The Sport Education Model is symbolized by X1, the maximum score obtained is 24, the minimum score is 10, the Mean obtained is 16.84, the Standard Deviation obtained is 4.08, and the Median is 17.

Table 4.2 Frequency Distribution of Sport Education Model

No	Interval	Category	Frequency	Percentage
1.	22-25	Very well	10	20,0%
2.	18-21	Good	13	27,6%

3.	14-17	Currently	12	23,4%
4.	10-13	Not enough	15	29,0%
5.	5-9	Less than once	0	0,0%
Amount			51	100%

From the table above, it is known that the ability of students is in the very good category as many as 10 students (20.0%), in the good category as many as 13 students (27.6%), in the moderate category as many as 12 students (23.4%), in the less category as many as 15 students (29.0%), and in the very less category as many as 0 students (0.0%). So it can be concluded that the physical fitness of students at Cijaralang 2 Elementary School is in the less category as many as 29.0%. If described in the form of a histogram is as follows :

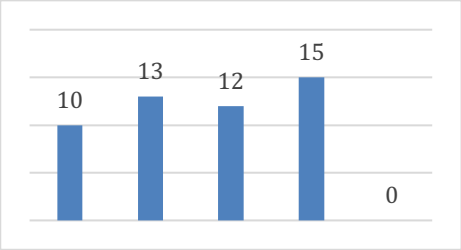

Figure 4.1 Bar Diagram of Sport Education Model Variables

2. Motivation

Motivation is symbolized by X2, the maximum score obtained is 145 and the minimum score is 93, the Mean obtained is 118.54, the Standard deviation obtained is 14.00, and the Median is 120..

Table 4.4 Frequency Distribution of Motivation

No	Interval	Category	Frequency	Percentage
1.	140-150	Very well	8	15 %
2.	125-139	Good	10	20 %
3.	111-124	Currently	13	26 %
4.	97-110	Not enough	15	30 %
5.	<96	Less than once	5	9 %
Amount			51	100%

From the table above, it is known that motivation is in the very high category for 8 students (15%), in the high category for 10 students (20%), in the medium category for 13 students (26%), in the low category for 15 students (30%), and in the very low category for 5 students (9%). So it can be concluded that the motivation of students at Cijaralang 2 Elementary School is in the low category for 30%. If described in the form of a histogram, it is as follows :

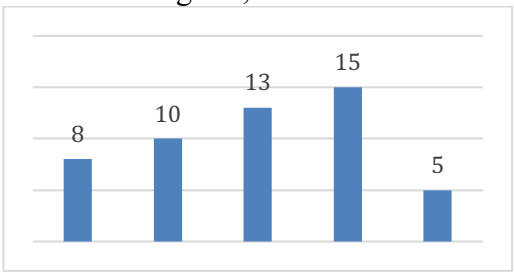

Figure 4.2 Bar Chart of Motivation Variables

3. Hypothesis Test Results

Data analysis is used to answer the hypothesis that has been proposed, before testing the hypothesis, several requirement tests are required to be met so that the results can be accounted for. The requirements include normality tests and linearity tests. The results of the analysis prerequisite tests and hypothesis tests are presented below.

1) Normality Test

The normality test was conducted using the Kolmogorov–Smirnov formula with the help of the SPSS program. The rule used to determine whether or not research data is normal is if p>0.05 (5%) then the data is declared normally distributed. The results of the normality test can be seen in the table below :

Table 4.5. Normality Test Results

One-Sample Kolmogorov-Smirnov Test	
	Unstandardized Residual

N		51
Normal Parameters[a,]	Mean	.0000000
	Std. Deviation	1.1649203 4
Most Extreme Differences	Absolute	037
	Positive	.027
	Negative	-.037
Test Statistic		037
Asymp. Sig. (2-tailed)		.200

a. Test distribution is Normal.

From the results above, a significant value (p) >0.05 was obtained, so it can be concluded that the data is normally distributed.

2) Linearity Test

The purpose of the linearity test is to determine whether the relationship between the independent and dependent variables is linear or not. The test uses the SPSS application by looking at the deviation from linearity at a significance level of 0.05. It is stated to have a linear relationship if the significance value of the deviation from linearity is more than 0.05. The results of the linearity test are presented in the following table :

Table 4.6 Linearity Test Results

Connection	Sig	P	Information
X1 - Y	0,062	0,05	Linear
X2 - Y	0,058	0,05	Linear

The results of the linearity test above show that the relationship between X1 and Y obtained a sig value of 0.062>0.05, meaning that there is a linear relationship between the physical fitness variable and learning outcomes. The relationship between X2 and Y obtained a sig value of 0.058>0.05, meaning that there is a linear relationship between the motivation variable and learning outcomes.

3) Multicollinearity Test

The multicollinearity test aims to test whether the regression model finds a correlation between independent variables. A good regression model should not have a near-perfect correlation between its independent variables. The way to find out whether or not there are symptoms of multicollinearity is by looking at the tolerance value and Variance Inflation Factor (VIF), if the VIF value is less than 10 and Tolerance is more than 0.1, then it is stated that there is no multicollinearity. The results of the multicollinearity test in this study are as follows :

Table 5.7 Multicollinearity Test

Variabel	Tolerance	VIF
Sports Education Model	0,589	1,699
Motivation	0,327	3,058

Based on the analysis above, the VIF value of Sport Education Model = 1.699 and tolerance value = 0.589. VIF value of Motivation = 3.058 and tolerance value = 0.327. In accordance with the requirements, data is said to have no multicollinearity if the VIF value <10 and variance> 0.1. The data in this study did not have multicollinearity because the VIF and tolerance values of all variables were <10 and> 0.1. So it can be concluded that the data in this study did not have multicollinearity.

4) Heteroscedasticity Test

The heteroscedasticity test aims to test whether in the regression model there is inequality of variance from residuals from one observation to another. A good regression model is one where there is no heteroscedasticity. This test can be done with Glejser, Spearman correlation test, Park test and looking at the dot pattern on the Scatter plot graph. If the sig value of the t test > significance level (0.05) then there is no heteroscedasticity.

Table 4.8 Heteroscedasticity Test

Variables	Sig Value	Sig

Sports Education Model	0,551	0,05
Motivation	0,613	0,05

Based on the results of the heteroscedasticity test above, the sig value is > 0.05. In accordance with the requirements, data is said to have no heteroscedasticity if the sig value is > 0.05, so it can be concluded that the data in this study does not have heteroscedasticity.

5) Hypothesis Testing

After the data prerequisite test is fulfilled, the next step is to test the hypothesis proposed in this study, namely the relationship between the Sport Education Model (X1), motivation (X2), and physical education learning outcomes (Y). The relationship between each X1 and Y, the relationship between X2 and Y uses the product moment correlation test from Karl person, while the relationship between X1, X2 together with Y uses multiple regression analysis with the F test. The results of the correlation test and multiple regression analysis are as follows :

a. Correlation Analysis

Correlation analysis is used to find the relationship between two variables, namely the independent variable and the dependent variable. The results of the correlation test can be seen in the table below.:

Table 4.9 Correlation Test Results

Variables	Physical education learning outcomes	XY sig value
Sports Education Model	0,745	0,000
Motivation	0,764	0,000

Table 4.10 Correlation Coefficient

Correlation Coefficient	
0,00-0,25	Very weak
0,26-0,50	Enough
0,51-0,75	Strong
0,76-0,99	Very strong
1,00	Perfect

Source: spssindonesia.com

1. The Relationship between Sport Education Model and Physical Education Learning Outcomes The first correlation test sought the relationship between physical fitness and physical education learning outcomes. The results of the analysis showed that the R value was 0.745 with a sig value of 0.000 <0.05, so it can be stated that there is a strong and significant positive relationship between physical fitness and physical education learning outcomes.
2. The Relationship between Motivation and Physical Education Learning Outcomes The second correlation test seeks the relationship between motivation and physical education learning outcomes. The results of the analysis show that the R value is 0.764 with a sig value of 0.000 <0.05, so it can be stated that there is a very strong and significant positive relationship between Motivation and physical education learning outcomes.

b. Multiple Regression Test Analysis

The next hypothesis test is to find the relationship between physical fitness, motivation together with the learning outcomes of physical education. Hypothesis testing is carried out using F test analysis. The calculated F value is 228.753 and the F table is 2.37 (with df1 = 4, df2 = 229). The results of the F test analysis are presented in the following table.:

Table 4.11 F Test Results

Variable Relationship	F Count	F Table	R	Sig Value
X1, X2 with Y	228,753	2,37	0,895	0,000

The results of the F test analysis of the relationship between the Sport Education Model, motivation, together with the results of learning physical education. Thus it can be concluded that there is a very strong and significant relationship between physical fitness, motivation, intellectual intelligence, and learning ability together with the results of learning physical education.

c. Effective and Relative Contribution of Physical Fitness, Motivation, Intellectual Intelligence and Learning Habits to Physical Education Learning Outcomes.

Effective Contribution is used to find out how much each predictor contributes to supporting the effectiveness of the regression line for the purposes of procuring predictors. Relative contribution is to find out how much each predictor contributes to the criterion value. The requirement for calculating effective contribution and relative contribution is to have the results of correlation and regression analysis. The amount of contribution from each independent variable to the dependent variable is as follows :

Table 4.12 Relative Contribution and Effective Contribution

Variables	Relative Contribution (SR) %	Effective Contribution (SE)%
X1	56.2	43.3
X2	43.8	36.8
Amount	**100**	**80.1**

Based on the calculation results above, it can be seen that the effective contribution (SE) of the Sport Education Model variable (X1) to the results of learning physical education (Y) is 43.3%, the effective contribution (SE) of the motivation variable (X2) to the results of learning physical education (Y) is 36.8%. Thus, it can be concluded that the physical fitness variable (X1) has a more dominant contribution than the motivation variable. The total effective contribution is the same as the R Square result, which is 80.1%. The results of the effective contribution can be explained that 80.1% of students whose physical education learning outcomes are influenced by the Sport Education Model variable, motivation. Based on the data results above, it can be concluded that the relative contribution of the Sport Education Model variable to the results of learning physical education is 43.3%, the relative contribution of the motivation variable to the results of learning physical education is 36.8%. The total of the relative contribution is 100%.

DISCUSSION

Based on the results of the hypothesis testing above, it was obtained that the independent variables have a positive and significant relationship to the dependent variables both individually and together. The discussion of the results of the hypothesis testing is as follows :

a. Relationship between Sport Education Model and Physical Education Learning Outcomes

The results of the data analysis prove that there is a positive and significant relationship between the Sport Education Model and physical education learning outcomes, indicated by an R value of 0.745 and a sig value of 0.000. Because the sig value is 0.000 <0.05, it can be stated that there is a positive and significant relationship between the Sport Education Model and physical education learning outcomes. Then looking at the categorization table which shows a low level of Sport Education Model and less than optimal learning outcomes, it means that the Sport Education Model also has an important role for students to get

optimal physical education learning outcomes. Therefore, teachers must apply the Sport Education Model to students so that during learning they still have high enthusiasm and focus and can understand the material presented by the teacher. A good Sport Education Model will support a person's success in learning, both learning movement and theory. Students who have a good category have a good lifestyle, do regular physical activity/sports, maintain a diet by eating healthy and nutritious foods, and have good energy sufficiency.

Another thing that can be used in an effort to get optimal learning outcomes is to combine physical education with structured activities, which will improve students' academic abilities (Mullender-Wijnsma et al., 2016). Teachers must also be able to provide a concept of the future to students so that students have a strong sense of improving their physical fitness. This self-concept is expected to improve current and future feelings (Pulung & Betaubun, 2019: 54). Thus, it is hoped that the learning outcomes will also be good.

The contribution of the Sport Education Model is expected to provide benefits in improving academic abilities and student concentration in learning. This change in mindset is expected to provide a good understanding where the Sport Education Model will have a good impact on improving learning outcomes.

b. Relationship between Motivation and Physical Education Learning Outcomes

The results of the data analysis prove that there is a positive and significant relationship between motivation and physical education learning outcomes. This is indicated by the R value of 0.764 with a sig value of 0.000, because the sig value of 0.000 <0.05, it can be stated that there is a strong and significant positive relationship between motivation and physical education learning outcomes. Then looking at the categorization table which shows a low level of motivation and less than optimal learning outcomes, it means that the level of motivation also has an important role for students to get optimal physical education learning outcomes. This means that the lower the motivation of students, the less optimal their learning outcomes, but if the motivation of students is higher, the higher it will be to encourage students to get better learning outcomes. Research conducted by (Z. Engin and P. Treleaven, 2019).

Motivation in physical education learning is very necessary so that students can follow the appropriate learning and learning objectives can be achieved so that student learning outcomes are optimal. Motivation in physical education learning can not only be raised by students themselves, but the role of a teacher to foster student motivation (Gómez-López et al., 2014). For example, by teachers explaining the intent and purpose of the tasks to be given, providing a way of success orientation, modifying sports branches, motivation in students, teaching by offering tasks, and variations between teaching tasks. For this reason, movement tasks are adjusted to the abilities of students and success criteria must also be adjusted to the level of development of students. The presence or absence of motivation greatly affects the success of student learning.

Learning success will be achieved if there is a will and drive to learn (Verena Jurik, Alexander Gröschner, Tina Seidel, 2014) Having good motivation in learning will show good learning outcomes. In other words, that with the existence of diligent effort and especially based on motivation, then someone who learns will be able to produce good learning outcomes. If an individual has

the motivation to learn, then he will receive optimal learning outcomes. Motivation can function as a driver of effort and achievement of learning outcomes, having good motivation in learning will show good learning outcomes too (Trenshaw et al., 2016).

The intensity of a person's motivation will greatly determine the level of achievement of their learning outcomes. Motivation and learning are two things that cannot be separated (Lotulung et al., 2018). In learning activities, motivation is needed to support student learning because learning that is based on strong motivation will provide better learning outcomes. In learning, the motivation factor has an important influence. Motivation is one of the factors that greatly determines student learning outcomes, in this case which makes behavior to learn with full initiative, creativity and direction. Students who have high motivation will always try to be better and want to always be seen as successful students in their environment. While students who do not have motivation will not show sincerity in learning, so that the learning outcomes obtained are not satisfactory. The higher the motivation of students, the higher the learning outcomes they get, and vice versa.

Research conducted by Park, H. S. (2016: 147) shows that motivation has a positive relationship with learning outcomes, this means that the higher the motivation, the higher the physical education learning outcomes obtained by students. In the learning process, motivation is one of the very important dynamic aspects. It often happens that students who do not have satisfactory learning outcomes are not caused by their lack of ability, but because there is no motivation to learn so that they do not try to direct all their abilities. The position of motivation in learning not only provides the right direction for learning activities, more than that, with motivation a person will get positive considerations in learning activities.

In the learning process, motivation for both teachers and students is very important in achieving learning success according to the expected goals. The learning process will be successful if students have good motivation. Teachers as educators and motivators must always motivate students to learn in order to achieve the desired goals and behavior. A meta-analysis presented by (Taylor et al., 2014) highlighted the role of motivation in student learning outcomes. They also found that good motivation is associated with higher learning outcomes. While research from (Barkoukis V, Taylor I, Chanal J, 2014) shows that more self-determined motivation results in higher physical education learning outcomes and, in addition, lower motivation results in lower learning outcomes.

c. Relationship between Sport Education Model and Motivation on Physical Education Learning Outcomes

The results of multiple regression analysis with the F test obtained a calculated F value of 228.753 and an F table of 2.37 (with df1 = 4, df2 = 229), with a significance value of 0.000. While the correlation value is 0.895. It can be concluded that physical fitness (X1), learning motivation (X2) together have a positive and significant relationship to learning outcomes (Y). The amount of contribution given by each independent variable to the dependent variable is the Sport Education Model variable has an effective contribution of 43.3%, the motivation variable has an effective contribution of 36.8%, while the remaining 19.9% is caused by other factors not examined in this study.

From the results of the analysis above, it shows that a good Sport

Education Model will help students have high learning motivation. With high learning motivation, students will increase their knowledge and increase their intelligence. These three things will certainly help students achieve optimal physical education learning outcomes, but the three things above must also be followed by good learning habits from students. Sport Education Model, good motivation will help students get optimal physical education learning outcomes. Students with good physical fitness, high motivation will be able to get good physical education learning outcomes.

CONCLUSION

Based on the data obtained from the analysis results, the following conclusions can be drawn :

1. Based on the analysis, the sig value of the Sport Education Model on physical education learning outcomes is 0.000 <0.05, so it can be stated that there is a significant relationship. The correlation value between the Sport Education Model and physical education learning outcomes is 0.745, which means that the relationship between the two variables can be said to be strong and has a positive relationship.
2. Based on the analysis, the sig value of motivation on physical education learning outcomes is 0.000 <0.05, so it can be stated that there is a significant relationship between the motivation variable and the physical education learning outcome variable. The correlation value between motivation and physical education learning outcomes is 0.764, which means that the relationship between the two variables can be said to be strong and has a positive relationship.
3. There is a positive and significant relationship between the Sport Education Model and motivation on physical education learning outcomes of students at Cijaralang 2 State Elementary School, this is indicated by the calculated F value> F table (228.753> 2.37) and the sig value of 0.000 <0.05. While the correlation value is 0.895. This relationship can be interpreted as the better the sports education model and motivation possessed by students, the higher the opportunity for students to obtain optimal physical education learning outcomes.

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