COMPETITOR:
JURNAL PENDIDIKAN KEPELATIHAN OLAHRAGA
e-ISSN: 2657-0734 & p-ISSN: 2085-5389 || Volume 17, Number 3, 2025 || P.2644-2668

Contribution of Physical Fitness, Infrastructure, and Learning Motivation on the Learning Outcomes of Grade VII Students at SMP Negeri 1 Tembilahan Hulu, Indragiri Hilir Regency

Budi Wahyono[1A-E*], Ahmad Lani[2B-D], Rochsun[3B-D], Susilo Bekti[4B-D], Ririn Dwi Agustin[5B-D]

[1,2,3,4,5] Universitas Insan Budi Utomo, East Java, Indonesia

budiwahyonouibu@gmail.com[1*], ahmadlani1967@gmail.com[2], sptrochsun@gmail.com[3]

ABSTRACT

This research is motivated by the low learning outcomes in Physical Education, Sports, and Health among grade VII students of SMP Negeri 1 Tembilahan Hulu, Indragiri Hilir Regency, where more than 51% of students have not achieved the Minimum Completion Criteria (KKM) of 78. This study employs a quantitative approach with a correlational design to analyze the relationship between physical fitness, infrastructure, and learning motivation in relation to learning outcomes at Penjasorkes. The study population consisted of 382 students, with a sample of 80 students selected using a proportional stratified random sampling technique. Data were collected through TKJI for physical fitness, and Likert scale questionnaires were used for infrastructure and learning motivation. The research instruments were tested for validity and reliability, and then analyzed using multiple linear regression analysis and multiple correlation with the help of SPSS version 25, accompanied by normality and linearity tests as statistical requirements. The results of the Study showed that physical fitness contributed 20%, infrastructure contributed 10.5%, and learning motivation contributed 12.4%, while the simultaneous contribution reached 32.9% to the learning outcomes of Physical Education and Health. This finding confirms that physical fitness factors have the most dominant influence on improving learning outcomes. In conclusion, the correlational approach has proven effective in identifying the influence of physical and psychological variables on student learning outcomes, and it serves as the basis for developing more targeted and data-driven Physical Education and Health learning strategies.

ARTICLE HISTORY
Received: 2025/10/10
Accepted: 2025/10/14
Published: 2025/10/20

KEYWORDS
Physical Fitness;
Infrastructure;
Learning Motivation;
Learning Outcomes.

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

Cites this Article : Wahyono, Budi; Lani, Ahmad; Rochsun, Rochsun; Bekti, Susilo; Agustin, Ririn Dwi. (2025). Contribution of Physical Fitness, Infrastructure, and Learning Motivation on the Learning Outcomes of Grade VII Students at SMP Negeri 1 Tembilahan Hulu, Indragiri Hilir Regency. **Competitor: Jurnal Pendidikan Kepelatihan Olahraga**. 17 (3), p.2644-2668

INTRODUCTION

The year 2025 is a milestone year in increasing power through education development. Education is essential for national development, not only as a personal need. One of the efforts in realising national education objectives through Physical Education, Sports, and

This work is licensed under a *Creative Commons Attribution 4.0 International License*
Copyright © 2018 by **Author**. Published by **Universitas Negeri Makassar**

Budi Wahyono[1A-E*], Ahmad Lani[2B-D], Rochsun[3B-D], Susilo Bekti[4B-D], Ririn Dwi Agustin[5B-D]
budiwahyonouibu@gmail.com[1*]

Health (PJOK) (Saitya & Muhadi, 2025). Learning Physical Education and Health not only emphasizes physical development of physical, but also aspects such as affective, cognitive, and social that participants (Dudley et al., 2022). Activities planned physically can increase fitness, discipline, and social skills. (Marani et al., 2024) Confirm that Physical Education and Health is an effective and enjoyable education if executed with the correct method, because it helps students connect theoretical knowledge with real-life experience (embodied learning). However, various findings show that the results of the Study on Physical education in various schools are still not optimal.

Based on the initial data at SMP Negeri 1 Tembilahan Hulu (Table 1), approximately 51.24% of students have not yet reached the KKM 78, indicating a fundamental problem in the learning process of Physical Education and Health. Conditions reinforced by the results of observations and interviews that show physical fitness in students, some of whom are easily tired, often during physical education and testing the physical education test at school. This indicates that the physical aspect is a basis for success in studying Physical Education and Health. It has not yet been developed optimally.

Table 1.
Learning Outcomes Physical Education and Health Student Class VII of SMP Negeri 1 Tembilahan Upstream of Indragiri Hilir Regency Semester II Year 2024/2025 academic year

Class	Class average	Number of students	Mark	
			< 78	_> 78
VII.A	79.72	36	14	22
VII.B	79.02	35	15	20
VII.C	75.87	32	15	17
VII.D	76.66	33	18	15
VII.E	76.50	32	18	14
VII.F	76.34	29	17	12
VII.G	76.06	32	17	15
VII.H	76.31	32	16	16
VII.I	76.61	30	13	17
VII.J	74.64	31	20	11
VII.K	75.03	31	17	14
VII.L	74.53	29	18	11
∑		**382**	**198**	**184**
Percentage		**100%**	**51.24%**	**48.16%**

From the data obtained, it is shown that the learning outcomes of Physical Education and Health of Class VII Students of SMP Negeri 1 Tembilahan Hulu are still low, out of 382 class VII students, there are around 184 students (48.16%) whose learning outcomes have reached the KKM limit, then around 198 students (51.24%) whose learning outcomes have not yet reached the KKM limit. According to these data, it is evident that many students have not yet reached the KKM.

Based on the results of the initial survey in Table 1, as indicated in a previous study (Amrulloh et al., 2024), factors that influence learning are explained. The results show that the study is influenced by internal factors, such as motivation and habit learning, and external factors, like environment and facilities. (Satin et al., 2021) Confirm that physical fitness contributes directly to a student's ability to engage in activities without feeling

Budi Wahyono[1A-E*], Ahmad Lani[2B-D], Rochsun[3B-D], Susilo Bekti[4B-D], Ririn Dwi Agustin[5B-D]
budiwahyonouibu@gmail.com[1*]

tired. However, Fajar Sidik Siregar et al. (2024) find that limitations in school sports infrastructure have implications for low physical activity among students. On the other hand, Irawan et al. (2024) show that motivation has a significant positive effect significant to student performance.

Although Lots' study has discussed the relationship between each factor and the study's results, there is still a need for further research that examines the simultaneous contribution of physical fitness, infrastructure, and motivation to the study's results. Physical education and health at the junior high school level, particularly in the Indonesian context, such as Indragiri Hilir Regency. Most studies previously focused on a single variable and were conducted in large teams with more extensive facilities. Problems with this critical review are that the results Show That Low physical education and health can hinder the achievement of national education objectives, especially in forming healthy students who are physically fit, mentally strong, and have character (Herdiansyah et al., 2024). Without understanding the underlying factors that influence learning outcomes, teachers will struggle to determine effective learning strategies (Nasution & Syaleh, 2021).

Therefore, this research aims to analyze the contribution of physical fitness, including infrastructure and motivation, to study results. The study focuses on Physical Education and Health students of State Middle School 1, Tembilahan Hulu. It is expected that the results of this study can provide practical and empirical solutions for physical education and health teachers to increase students' results through optimized physical fitness, effective infrastructure utilization, and strengthened student motivation.

METHODS

This study used a quantitative approach with a correlational design. The correlational approach is used to test the extent of the relationship between two or more variables without manipulating those variables. According to (Nurhayati et al., 2025), correlational research aims to identify and measure the strength and direction of relationships between variables, thereby understanding specific patterns or trends in the data obtained.

This study aims to reveal the relationship and contribution of physical fitness, infrastructure, and learning motivation to physical education and health learning outcomes. Therefore, this type of research is correlational, aiming to reveal the relationship between the independent and dependent variables based on the magnitude of the correlation. Furthermore, to calculate the magnitude of the contribution, the Determination Index Formula is used, namely, r^2 x 100%.

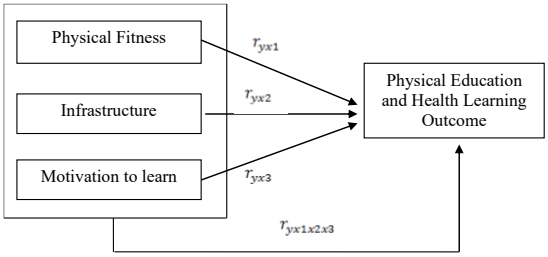

Figure 1.
Research Design

Budi Wahyono[1A-E*], Ahmad Lani[2B-D], Rochsun[3B-D], Susilo Bekti[4B-D], Ririn Dwi Agustin[5B-D]
budiwahyonouibu@gmail.com[1*]

The population of this study consisted of 382 students from 12 classes in Grade VII at SMP Negeri 1 Tembilahan Hulu, Indragiri Hilir Regency. Because the population of this study was quite large, not all of it could be studied; in other words, it was necessary to draw a sample to represent the existing population. The sampling technique used was the "Proportional Stratified Random Sampling" technique. To determine the sample size of the population, the *Slovin approach was used* as follows (Sugiyono, 2020) with a value of. The results of the formula value were based on 80 randomly selected students from each of 12 classes, totalling approximately 6.7 students per class, rounded to 7 or more students per class. Furthermore, the number of samples in each class was determined by the proportional allocation formula. Based on the formula, the number of samples in each class is known, as shown in Table 2.

Table 2.
Proportions Sample of Students of State Junior High School 1, Tembilahan Hulu Regency, Indragiri Hilir Year Academic Year 2024/2025

State Junior High School 1, Tembilahan Hulu					
No	**Class**	**Formula (Ni/N).n**	**Man**	**Woman**	**Total**
1	VII.A	(36/382).80 = 7.5	3	5	8
2	VII.B	(35/382).80 = 7.3	4	3	7
3	VII.C	(32/382).80 = 6.7	5	2	7
4	VII.D	(33/382).80 = 6.9	3	4	7
5	VII.E	(32/382).80 = 6.7	2	5	7
6	VII.F	(29/382).80 = 6.0	5	1	6
7	VII.G	(32/382).80 = 6.7	4	3	7
8	VII.H	(32/382).80 = 6.7	3	4	7
9	VII.I	(30/382).80 = 6.2	3	3	6
10	VII.J	(31/385).80 = 6.4	4	2	6
11	VII.K	(31/382).80 = 6.4	2	4	6
12	VII.L	(29/382).80 = 6.0	3	3	6
Total			**41**	**39**	**80**

Of the 80 students in this study, 41 were male and 39 were female. To make it easier for researchers to draw a random sample, they used a random technique by drawing lots (i.e., luck).

The data collection technique in this research contains five things that will be collected:

Learning outcomes

In this study, the researchers used data from physical education and health teachers at SMP Negeri 1 Tembilahan Hulu, Indragiri Hilir Regency, to assess the physical education and health learning outcomes. The categories assessed for the semester exam were floor gymnastics and rhythmic gymnastics. And a 1200-meter run

Physical Fitness

Test Freshness: This Indonesian Physical Education (TKJI) is a series of tests that measure physical fitness level. It has been standardized and extensively tested,

becoming one of the accepted measuring tools for assessing physical fitness levels in accordance with age.

Facilities and infrastructure

Completeness means infrastructure. Learning is reviewed from: (a) Equipment, infrastructure, (b) Equipment, infrastructure, (c) Facilities, (d) Comfort of infrastructure, (e) Maintenance of infrastructure, (f) Media and other sources. The instrument grid for infrastructure variables is listed in the Table below:

Table 3.
Grid of Infrastructure Research Instruments

Variables	Indicator	Item Number
Infrastructure	1. Infrastructure Equipment	1,2,3,4,5,6,
	2. Infrastructure Equipment	7,8,9,10,11,12,13,14
	3. Facility	15,16,17,18,19,20,21
	4. Convenience of Facilities and Infrastructure	22,23,24,25,26,27,28,29
	5. Maintenance of Infrastructure Facilities	30,31,32,33,34,35
	6. Media and Other Sources	36,37,38,39,40

Motivation Study

Student motivation in learning activities can be said to be the overall driving force or impetus that exists within and outside of a student that gives rise to learning activities. The grid of learning motivation variable instruments is listed in the table below :

Table 4.
Grid Instrument Study Motivation Study

Variables	Indicator	Item Number
Motivation to learn	1. Desire and wish to succeed	1,2,3,4,5,6,7
	2. Drive and need in Study	8,9,10,11,12,13,14
	3. Hopes and aspirations for the future	15,16,17,18,19,20,21,22
	4. Award in Study	23,24,25,26,27,28
	5. Interesting activities in the Study	29,30,31,32,33,34,35
	6. Environment conducive to learning	36,37,38,39,40

Instrument Study

Research instruments are tools used during research to collect data collection method. The instruments used to collect data for each variable are as follows:

a. The instrument used to measure physical fitness is the TKJI test for children aged 13 to 15 years.
b. The instruments used to measure infrastructure are questionnaires and observations.
c. The instrument used to measure learning motivation is a customized questionnaire.
d. The instrument used to determine students' physical education and health learning outcomes is the grades from semester I (two) of the 2016/2017 academic year.

The questionnaire consists of a number of closed questions using a Likert scale with five alternative answers.

Budi Wahyono[1A-E*], Ahmad Lani[2B-D], Rochsun[3B-D], Susilo Bekti[4B-D], Ririn Dwi Agustin[5B-D]
budiwahyonouibu@gmail.com[1*]

Table 5.
Measurement Scale Instrument Study

Likert Scale	Nature of Statements	
	Positive	Negative
Always (SL)	5	1
Frequently (SR)	4	2
Sometimes (KD),	3	3
Rare (JR)	2	4
Never (TP)	1	5

Source: (Sugiyono, 2020)

Data on research. This was collected with a use scale model Likert scale developed for each variable studied, which means infrastructure as well as motivation for learning. Instrument study with the use Likert scale created in checklist form, such as a table under this:

Table 6.
Examples Form Charging Questionnaire

No	Statement	Answer				
		SL	SR	KD	JR	TP
1	I am present at school before the bell rings.		√			

Validity test in this study to correlate the instrument item scores and the total score with the help of the SPSS (Statistical *Product and Service Solution*) program on a computer with *Product-Moment*. The results were found by comparing the r xy value of each question item with the value in the r Table at a significance level of 0.361. If the calculated r value is greater than or equal to the r value in the Table, the statement item can be considered valid. Furthermore, the reliability test employed *the Cronbach's Alpha* technique to assess the reliability of the statement items and statement indicators.

The data analysis technique for this research was assisted by the SPSS 25 computer program, with several analyses as follows:

1. Analysis Descriptive
2. Prerequisite Tests: Normality Test and Linearity Test
3. Multiple Linear Regression
4. Correlation Test Multiple

From the calculated F results, I then consulted the F Table. Next (Sugiyono, 2020) states that one can give an interpretation to the coefficient correlation found to be big or small, then can be based on the provisions stated as follows:

Table 7.
Guidelines for Interpreting Correlation Coefficients

Coefficient Interval	Relationship Level
0.00 – 0.199	Very Low
0.20 – 0.399	Low
0.40 – 0.599	Currently
0.60 – 0.799	Strong
0.80 – 1,000	Very strong

The percentage influences all variables independent of to mark variables dependent aimed at the size coefficient determination (R-squared). Coefficient value

Budi Wahyono[1A-E*], Ahmad Lani[2B-D], Rochsun[3B-D], Susilo Bekti[4B-D], Ririn Dwi Agustin[5B-D]
budiwahyonouibu@gmail.com[1*]

determination shows a percentage variation value that can be explained with the method of squaring r result, so that, for looking for donation according to (Kurniawan, 2016), it can be searched for with the KD formula = r^2 x 100%.

RESULTS AND DISCUSSION

Result

This section presents a description of the data resulting from measurements on all research objects. This research data consists of the following independent variables: Physical Education Learning Outcomes (Y), Physical Fitness (X1), Facilities and Infrastructure (X2), and Learning Motivation (X3). Data processing is presented sequentially in the following Table.

Table 8.
Summary of Research Data Average

Variables	N	Mean	Elementary School	Min	Max
Physical Education and Health Learning Outcomes	80	76.65	6.82	67	87
Physical Fitness	80	13.19	2.62	10	18
Infrastructure	80	110.66	7.68	90	124
Motivation to learn	80	123.10	9.36	112	144

For a clearer picture of the condition of each data point in the group, you can see the following description:

Physical Education and Health Learning Outcomes

Learning outcomes in physical education, symbolized with Y, obtained a maximum score of 87, and the minimum score was 67. The mean obtained of 76.65, and the Standard deviation obtained of 2.82.

Determination amount interval class using the formula K = 1 + 3.3 log n. Where n is the subject study, which is 80, so obtained Lots class 1 +3.3 log 80 = 7.27, rounded into 7 interval classes. The data range is the largest data value, reduced mark the smallest is marked. Then we get a data range is 87 - 65 = 22. With its known data range, the long class interval of each group 22 / 7 = 3.14, rounded up to 3.

Distribution table frequency results. Study Physical Education and Health students can be seen in the table distribution frequency below:

Table 9.
Distribution Frequency Learning Outcome Data Physical Education and Health (Y)

No	Interval Class	Frequency	Percentage (%)
1	65 - 67	9	11.25
2	68 - 70	11	13.75
3	71 - 73	7	8.75
4	74 - 76	13	16.25
5	77 - 79	9	11.25
6	80 - 82	12	15
7	83 - 85	12	15
8	86 - 88	7	8.75
Amount		**80**	**100**

Based on the table frequency above, can histogram is depicted as follows:

Budi Wahyono[1A-E*], Ahmad Lani[2B-D], Rochsun[3B-D], Susilo Bekti[4B-D], Ririn Dwi Agustin[5B-D]
budiwahyonouibu@gmail.com[1*]

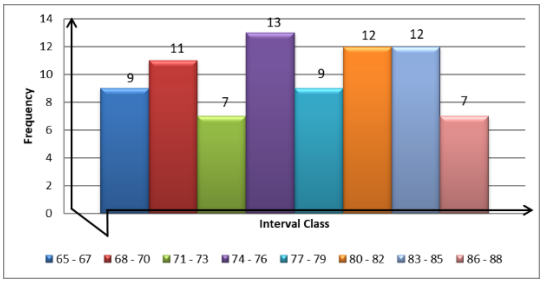

Figure 2.
Histogram of Learning Outcome Variables: Physical Education and Health

After determining the Table frequency, the Table category score was studied. The study Was Conducted in Physical Education specifically for the known range score and categorized into very high, high, medium, low, and very low. Based on the calculation range score, the amount can be calculated. Respondents were classified into five categories: very high, high, medium, low, and very low. (Sudijono, 2012). The Table categorizing the learning outcomes scores for Physical Education and Health is as follows:

Table 10.
Learning Outcome Data Categories: Physical Education and Health

No	Interval Class	F absolute	F relative	Information
1	< 66.41	5	6.25	Less than once
2	66.41-73.24	22	27.5	Not enough
3	73.24-80.06	26	32.5	Currently
4	80.06 - 86.89	20	25	Good
5	> 86, 89	7	8.75	Very well
	Amount	**80**	**100**	

The Table shows that of the 80 students, there are five people in the interval class < 66.41, or (6.25 %), who are included in the category not enough once. While in the category not enough or in the interval class 66.41-73.24, there are 22 people (27.75 %). In the interval class 73.24-80.06, with a category of moderate, there are 26 people (32.5%). In the interval class 80.06 - 86.89, with the category 'well', there are 20 samples (25%). Furthermore, those in the interval class > 86.89 with category Good, there are seven people (8.75 %).

Based on the average score of learning outcomes, which reached as high as 76.65, it can be concluded that the learning outcomes sample in the category 'Where are you' comprises 27 people with below-average learning outcomes and 53 people with learning outcomes above average, indicating that more samples have learning outcomes above average. For clarity, the results calculation and description, as well as the distribution frequency of learning outcome data, can be seen in *the pie chart* in the following image.

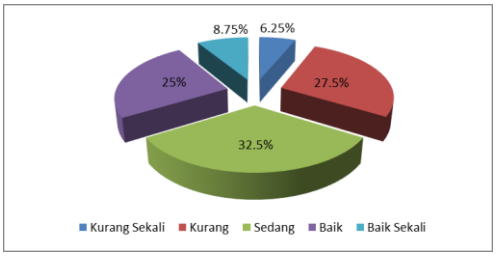

Figure 3.
Pie Chart Physical Education and Health Learning Outcomes Category (Y)

Budi Wahyono[1A-E*], Ahmad Lani[2B-D], Rochsun[3B-D], Susilo Bekti[4B-D], Ririn Dwi Agustin[5B-D]
budiwahyonouibu@gmail.com[1*]

Physical Fitness

A fitness physical is symbolized by X 1; the score obtained ranges from a maximum of 18 to a minimum of 10. The mean obtained was 13.19, and the standard deviation obtained was 2.62. Furthermore, the distribution frequency was arranged based on TKJI standard norms for children aged 16-19 years old. The frequency distribution Table below shows the frequency of students' physical fitness.

Table 11.
Data Frequency Distribution Fitness Physical (X_1)

No	Interval Class	Category	Frequency	Percentage (%)
1	22 - 25	Very well	0	0
2	18 - 21	Good	4	5
3	14 - 17	Currently	33	41.25
4	10 - 13	Not enough	33	41.25
5	5 - 9	Less than once	10	12.5
Amount			**80**	**100**

Based on the table frequency above, it can be depicted in a *pie chart* as follows:

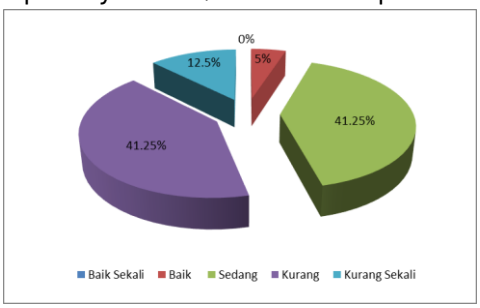

Figure 4.
Pie Chart Category Physical Fitness

From the Table and image above can known level fitness physical participant educate part big is in the category currently as many as 33 children (41.25%), and participants educate is in the category not enough as many as 33 children (41.25%), category not enough very as many as 10 children (12.5%), participants educate is in the category both four children (5%). Participants are educated in the category 'Good' with a very low percentage of 'No' responses (0%). Thus, the frequency is highest in the category of moderate, and lower in terms of freshness, participants' physical condition, and education, which can be described as mild and lacking.

Infrastructure

Infrastructure is symbolized by X^2, where the score obtained ranges from a maximum of 124 to a minimum of 90. The mean obtained was 110.66, and the standard deviation obtained was 7.68. Determination of the number of interval classes using the formula K = 1 + 3.3 log n. The n is the research subject, namely 80, so the number of classes obtained is 1 + 3.3 log 80 = 7.27, rounded to 7 interval classes. The data range is the difference between the most significant and the least significant data values. So the data range obtained is 124 - 90 = 34. By knowing the data range, the length of the interval class for each group can be calculated: 34 / 7 = 4.8, rounded to 5.

Budi Wahyono[1A-E*], Ahmad Lani[2B-D], Rochsun[3B-D], Susilo Bekti[4B-D], Ririn Dwi Agustin[5B-D]
budiwahyonouibu@gmail.com[1*]

The frequency distribution Table of students' physical education and health learning outcomes can be seen in the frequency distribution Table below:

Table 12.
Data Frequency Distribution of Infrastructure (X2)

No	Interval Class	Frequency	Percentage (%)
1	90 - 94	1	1.25
2	95 - 99	6	7.5
3	100 - 104	10	12.5
4	105 - 109	19	23.75
5	110 - 114	16	20
6	115 - 119	18	22.5
7	120 - 124	10	12.5
Amount		**80**	**100**

Based on the table frequency above, can histogram is depicted as follows:

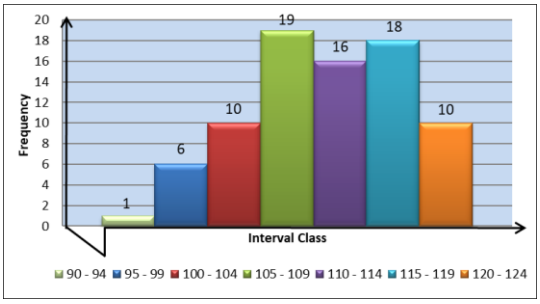

Figure 5.
Histogram of Infrastructure Variables

After determining the Table frequency, a Table category was created, which provides infrastructure for the known range score and total responses, categorized as good, perfect, moderate, poor, and average. Based on the calculation range score, we can count the number of respondents who fall into the categories of 'Good', 'Very Good', 'Moderate', 'Poor', and 'Very Poor' (Sudijono, 2012). Table of categorization of facility scores. The infrastructure is as follows:

Table 13.
Categories Infrastructure Data Frequency (X_2)

No	Interval Class	$F_{absolute}$	$F_{relative}$	Information
1	< 99.15	7	8.75	Less than once
2	11.15 - 106.82	18	22.5	Not enough
3	106.82 - 114.50	27	33.75	Currently
4	114.50 - 122.18	25	31.25	Good
5	>122.18	3	3.75	Very well
Amount		**80**	**100**	

The Table shows that out of the 80 students, 17 students were in the interval class < 99.15 or (8.75%) belonging to the category 'not enough once'. In the category not enough or in the class interval 11.15 - 106.82, there are 18 people (22.5 %). In the interval class 106.82 - 114.50, with a category of moderate, there are 27 people (33.75%). In the interval class 114.50 - 122.18, categorized as 'well', there are 25 samples (31.25%). Furthermore, those in the interval class > 122.18 with category 'Good' were three people (3.75%).

Based on the average score of the infrastructure variables, which reached 110.66, it can be concluded that the facilities and infrastructure at the school are in the category

Budi Wahyono[1A-E*], Ahmad Lani[2B-D], Rochsun[3B-D], Susilo Bekti[4B-D], Ririn Dwi Agustin[5B-D]
budiwahyonouibu@gmail.com[1*]

where you are 25, with a level of physical fitness below average, and 55 above average infrastructure, which means more. The school's facilities and infrastructure are of above-average quality. For clarity, the results calculation and description, as well as the distribution frequency of the resulting data infrastructure, are illustrated in *the pie chart* diagram shown in the following image.

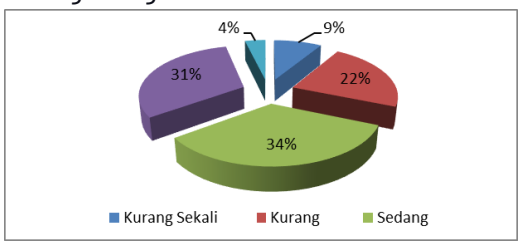

Figure 6.
Pie Chart Category: Infrastructure

Motivation to Learn

X3 symbolizes motivational learning; the score obtained ranges from a maximum of 144 to a minimum of 103. The mean obtained was 123.10, and the standard deviation obtained was 9.36. Determination of the number of interval classes using the formula K = 1 + 3.3 log n. As for n, the research subject, namely 80, the number of classes obtained is 1 + 3.3 log 80 = 7.27, rounded to 7 interval classes. The data range is the difference between the most significant and most significant data values. So the data range obtained is 144 - 103 = 41. By knowing the data range, the length of the interval class for each group can be obtained: 41 / 7 = 5.8, rounded to 6.

The frequency distribution Table of students' physical education and health learning outcomes can be seen in the frequency distribution Table below:

Table 14.
Frequency Distribution of Motivation Data Study (X_3)

No	Interval Class	Frequency	Percentage (%)
1	103 - 108	6	7.5
2	109 - 114	8	10
3	115 - 120	19	23.75
4	121 - 126	14	17.5
5	127 - 132	19	23.75
6	133 - 138	12	15
7	139 - 144	2	2.5
Amount		**80**	**100**

Based on the table frequency above, can histogram is depicted as follows:

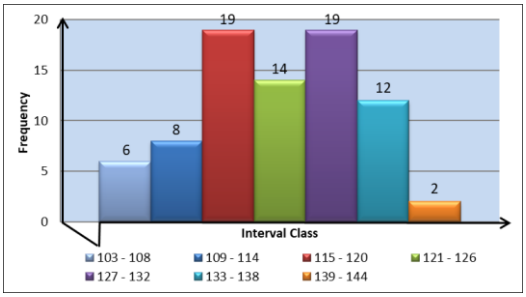

Figure 7.
Histogram of Variables Motivation Study

Budi Wahyono[1A-E*], Ahmad Lani[2B-D], Rochsun[3B-D], Susilo Bekti[4B-D], Ririn Dwi Agustin[5B-D]
budiwahyonouibu@gmail.com[1*]

After determining the Table frequency, a Table category score was created, specifically for the known range score and the total respondents, categorizing them into five categories: good, excellent, moderate, poor, and inferior. Based on the calculation range score, we can count the number of respondents who fall into the categories of Good, Very Good, Moderate, Poor, and Very Poor. Motivation score categorization Table learning is as follows:

Table 15.
Categories Frequency of Student Learning Motivation Data (X_3)

No	Interval Class	F absolute	F relative	Information
1	< 109.06	10	12.5	Less than once
2	109.06 - 118.42	15	18.75	Not enough
3	118.42 - 127.78	27	33.75	Currently
4	127.78 - 137.14	26	32.5	Good
5	>137.14	2	2.5	Very well
Amount		**80**	**100**	

The Table shows that of the 80 students, 10 people are in the interval class <109.06, or 12.5%, belonging to the category 'not enough once'. While in the category 'not enough' or in the interval class 109.06 - 118.42, there are 15 people (18.75%). In the interval class 118.42 - 127.78, with a category of moderate, there are 27 people (33.75%). In the interval class 127.78 - 137.14 with the category 'well', there are 26 samples (32.5%). Furthermore, those in the interval class > 137.14 with category 'Good' are two people (2.5%).

Based on the score average of the level of learning motivation obtained as high as 123.10, it can be concluded that the level of motivation to learn in the category is where 25 people are with a level below average learning motivation, and 55 people have a level above average learning motivation, which means that more samples are at the level above average learning motivation. For clarity, the results calculation and description, as well as the distribution frequency of the resulting data, are illustrated in *the pie chart* diagram shown in the following image.

Data Analysis Requirements Testing

Normality Test

The normality test was performed on the variables using the *Lilliefors test* with a significance level of $\alpha = 0.05$. The test criteria are that H0 is rejected if L0 obtained from the observation data exceeds Lt, and conversely, H0 is accepted if Lt is greater than L0, which can be simply stated as follows:

H0 = rejected if L 0 > L t, which means the data is normally distributed

Ha = accepted if L 0 < L t, which means the data is distributed abnormally

The calculation results of the complete normality test are presented in Attachment 11, page 238. And as the summary seen in the Table following:

Table 16.
Summary of Research Data Normality Test Results

Variables	N	L_o	L_{table}	Information
Physical Education and Health Learning Outcomes	80	0.086	0.099	**Normal**
Physical Fitness	80	0.066		
Infrastructure	80	0.072		
Motivation to learn	80	0.097		

Budi Wahyono[1A-E*], Ahmad Lani[2B-D], Rochsun[3B-D], Susilo Bekti[4B-D], Ririn Dwi Agustin[5B-D]
budiwahyonouibu@gmail.com[1*]

Based on the results of the normality test of the calculation, the above research found that the obtained value of PricL0 0 was significantly smaller than that of the L-test at a significance level of α = 0.05. Thus, it can be concluded that all data groups in this research were derived from a normally distributed population, which is suitable for testing hypotheses in a study.

Data Linearity Test

The linearity test is conducted to determine whether each data variable — physical fitness, infrastructure, and learning motivation — tends to form a linear relationship with the variables Physical Education and Health learning outcomes in Class VII of State Junior High School 1 Tembilahan Hulu, Regency of Indragiri Hilir. H0 is tested in matter. This includes physical fitness data (X1), infrastructure (X2), and learning motivation (X3), which have a linear relationship with the student learning outcomes in Physical Education and Health (Y). Class VII of SMP Negeri 1 Tembilahan Hulu Regency, Indragiri Hilir. Criteria testing is H0 accepted if the mark F count obtained from the calculation < F Table. A summary of the linearity test can be seen in the Table, analyzing the set in, as referenced in the Attachment.

Table 17.
Summary of Linearity Test Results: Variables Physical Fitness (X_1), Facilities and Infrastructure (X_2) and Learning Motivation (X_3) on Physical Education and Health Learning Outcomes (Y)

Variables	F_{count}	F_{table} α = 0.05	Conclusion
X_1 - Y	0.96		
X_2 - Y	0.93	2.07	**Linear**
X_3 - Y	0.90		

Furthermore, using the calculation coefficient, the independent coefficient was reached, indicating whether there is an invariant relationship between physical fitness, infrastructure, and learning motivation, which are variables that can be seen in the Table. While analyzing the test.

Independence Test

Furthermore, using the calculation coefficient, the independent coefficient was reached, indicating whether there is an invariant relationship between physical fitness, infrastructure, and learning motivation, which are variables that can be seen in the Table. While analyzing the test.

Table 18.
Summary of Independence Test Results between Variables Free

Correlation between	Correlation Coefficient	t_{count}	t_{table}	Conclusion
X_1 - X_2	0, 191	1.41		
X_1 - X_3	0, 2 09	1.08		Not Significant
X_2 - X_3	0.084	0.74	1.66	

Based on the significance test correlation between partner score physical fitness (X_1) against infrastructure (X_2), score physical fitness (X_1) against learning motivation (X_3), score infrastructure (X_2) against learning motivation (X_3), as in the table obtained $t_{count} < t_{table}$ level

Budi Wahyono[1A-E*], Ahmad Lani[2B-D], Rochsun[3B-D], Susilo Bekti[4B-D], Ririn Dwi Agustin[5B-D]
budiwahyonouibu@gmail.com[1*]

significance α = 0.05. Thus can be concluded that there is no significant relationship between physical fitness (X_1) against infrastructure (X_2), physical fitness (X_1) towards learning motivation (X_3), or infrastructure (X_2) towards learning motivation (X_3).

Hypothesis Testing

After the analysis requirements test was conducted, it turned out that all scores for each research variable met the requirements for further statistical testing. Then, the research hypothesis testing was carried out, namely: 1) physical fitness has a positive contribution to learning outcomes, 2) infrastructure has a positive contribution to learning outcomes, 3) learning motivation has a positive contribution to learning outcomes, and 4) physical fitness, infrastructure, and learning motivation have a positive contribution to learning outcomes. The statistical test used was correlation analysis at a significance level of α = 0.05. For more details, it will be presented sequentially as follows.

The Contribution of Physical Fitness to Physical Education Learning Outcomes of Classroom Students VII State Junior High School 1, Tembilahan Hulu, Indragiri Hilir Regency

The results of the analysis show that there is a contribution of physical fitness (X1)to the learning outcomes of Physical Education and Health. Seventh-grade students of SMP Negeri 1 Tembilahan Hulu, Indragiri Hilir Regency. The value of the equation, the regression can be depicted as follows: $\hat{Y}$ = 61.30+1.16X to F_{count}(19.54)> F_{table}(3.96). Next, based on the analysis, linearity regression obtained a mark F_{count}(0.96) < F_{table}(2.07). This is state that the data is in a linear state. Thus, the proposed hypothesis (H_a) can be accepted. For more to be clear, can be seen in attachment 14, page 2, 63, and the summary can be seen in the table following:

Table 19.
List of ANOVA Regression Linear $\hat{Y}$ =61.30+1.16X

Source of Variation	Dk	JK	KT	Fh	Ft α =0.05	Conclusion
Total	80	473696	-	-		
Coefficient (a)	1	470017.8	-			Significant regression (meaning)
Regression (b/a)	1	736.89	736.89	19.54	**3.96**	
Remainder	78	2941.31	37.71			
Tuna Match	8	290.55	36.32	0.96	**2.07**	Linear Regression
Error	70	2650.77	37.87			

Next in the table analysis, research data correlation obtained a coefficient correlation of physical fitness to learning outcomes, r_{count}(0.4 48) with t_{count} = 4.42 > t_{table} = 1.6 6, stating that physical fitness contributes to results. Study Physical Education and Health Student Class VII of SMP Negeri 1 Tembilahan Hulu, Indragiri Hilir Regency. Analysis Correlation X_1 against Y can see attachment 16 page 2 85.

Table 20.
Analysis Correlation X_1 against Y

Correlation Between	r	r^2	Coefficient of Determination	t_{count}	t_{table} α = 0.05	Conclusion
X_1 against Y	0.4 48	0.200	20%	4.42	1.6 6	Positive Relationship

To see the connection, pure X_1 with Y controlled by X_2 is done analysis of partial correlation. In the table analysis correlation partial research data obtained coefficient

correlation physical fitness to Physical Education and Health learning outcomes controlled by facilities and infrastructure r_{count} (0.792) with t_{count} = 4.42> t_{table} = 1.6 6 state that there is a positive relationship between X_1 with Y when controlled by X_2. Meaning that variables' physical fitness as *independent* variables contribute as much as 62.72 % to the *dependent* variable, namely the results Study Physical Education and Health student Class VII of SMP Negeri 1 Tembilahan Hulu, Indragiri Hilir Regency. Analysis Correlation Partial X_1 on Y is controlled by X_2 can See attachment 18, page 296.

Table 21.
Analysis Correlation Partial X_1 on Y is controlled by X_2

Correlation Between	r	r^2	Coefficient of Determination	t_{count}	t_{table} α = 0.05	Conclusion
X_1 on Y is controlled by X_2	0.792	0.627	62.72%	11.40	1, 6 6	Positive relationship

Analysis results show that there is a contribution infrastructure (X_2) to Physical Education and Health learning outcomes for student Class VII of SMP Negeri 1 Tembilahan Hulu, Indragiri Hilir Regency. The value of the equation, the regression can be depicted as follows: $\hat{Y}$ = 44.70+0.29X against F_{count} (9.19)> F_{table} (3.96). Next, based on analysis, the linear regression obtained a mark F_{count} (0.93) < F_{table} (1.67). This is state that the data is in a linear state. Thus, the proposed hypothesis (H_a) can be accepted. For more to be clear, can be seen in attachment 14, page 263, and the summary can be seen in the table following:

Contribution of Facilities and Infrastructure to Physical Education and Health Learning Outcomes of Class Students VII State Junior High School 1, Tembilahan Hulu, Indragiri Hilir Regency

Analysis results show that there is a contribution infrastructure (X_2) to Physical Education and Health learning outcomes for student in Class VII of SMP Negeri 1 Tembilahan Hulu, Indragiri Hilir Regency. The value of the equation, the regression can be depicted as follows $\hat{Y}$ = 44.70+0.29X against F_{count} (9.19)> F_{table} (3.96). Next, based on analysis, the linear regression obtained a mark F_{count} (0.93) < F_{table} (1.67). This is state that the data is in a linear state. Thus the proposed hypothesis (H_a) can be accepted. For more to be clear, can be seen in attachment 14, page 263, and the summary can be seen in the table following:

Table 22.
List of ANOVA Regression Linear $\hat{Y}$ =61.30+1.16X

Source of Variation	Dk	JK	KT	Fh	Ft α =0.05	Conclusion
Total	80	473696	-	-		
Coefficient (a)	1	470017.8	-			
Regression (b/a)	1	387.87	387.87	9.19	**3.96**	Significant regression (meaning)
Remainder	78	3290.33	42.18			
Tuna Match	25	999.78	39.99	0.93	**1.67**	Linear Regression
Error	53	2290.55	43.22			

Next in the table, research data correlation analysis obtained a coefficient correlation of physical fitness to learning outcomes. Physical education and health $_{count}$ (0.325) with t_{count}

Budi Wahyono[1A-E*], Ahmad Lani[2B-D], Rochsun[3B-D], Susilo Bekti[4B-D], Ririn Dwi Agustin[5B-D]
budiwahyonouibu@gmail.com[1*]

= 3.03 > t_{table} = 1.6, 6 states that infrastructure contributes to results. Study Physical Education and Health student Class VII of SMP Negeri 1 Tembilahan Hulu, Indragiri Hilir Regency. Analysis Correlation X_2 against Y can see attachment 16 page 2 85.

Table 23.
Analysis Correlation X_2 against Y

Correlation Between	r	r2	Coefficient of Determination	t_{count}	t_{table} α = 0.05	Conclusion
X_2 against Y	0.325	0.105	10.5%	3.03	1.6 6	Positive Relationship

To see the connection, pure X_2 with Y controlled by X_3 is done analysis of correlation partial. In the table analysis correlation partial research data obtained coefficient correlation i infrastructure to learning outcomes controlled by learning motivation r_{count}(0.444) with t_{count} = 3.03> t_{table} = 1.6 6 state that There is a positive relationship between X_2 and Y when controlled by X_3. It means that the variables infrastructure as *independent* variables make a contribution as big as 19.71 % against the *dependent* variable, namely the results Study Physical Education and Health student Class VII of SMP Negeri 1 Tembilahan Hulu, Indragiri Hilir Regency. Analysis Correlation Partial X_2 against Y is controlled by X_3 can See attachment 18, page 296.

Table 24.
Analysis Correlation Partial X_2 on Y is controlled by X_3

Correlation Between	r	r^2	Coefficient of Determination	t_{count}	t_{table} α = 0.05	Conclusion
X_2 on Y is controlled by X_3	0.444	0.200	19.71%	4.35	1, 6 6	Positive relationship

Contribution of Learning Motivation to Physical Education and Health Learning Outcomes of Class Students VII State Junior High School 1, Tembilahan Hulu, Indragiri Hilir Regency

Analysis results show that there is a contribution of learning motivation ($_{X3}$) to Physical Education and Health learning outcomes, Student Class VII of SMP Negeri 1 Tembilahan Hulu, Indragiri Hilir Regency. The value of the equation, the regression can be depicted as follows $\hat{Y}$ =44.93+0.26X against F_{count}(9.19)> F_{table}(3.96). Next, based on analysis, the linear regression obtained a mark F_{count}(0.93)< F_{table}(1.60). This is state that the data is in a linear state. Thus the proposed hypothesis (H_a) can be accepted. For more to be clear, can be seen in attachment 14, page 2,63, and the summary can be seen in the table following:

Table 25.
List of ANOVA Regression Linear $\hat{Y}$ =61.30+1.16X

Source of Variation	Dk	JK	KT	Fh	Ft α =0.05	Conclusion
Total	80	473696	-	-		
Coefficient (a)	1	470017.8	-			Significant regression (meaning)
Regression (b/a)	1	387.87	387.87	9.19	**3.96**	
Remainder	78	3290.33	42.18			
Tuna Match	25	999.78	39.99	0.93	**1.60**	Linear Regression
Error	53	2290.55	43.22			

Budi Wahyono[1A-E*], Ahmad Lani[2B-D], Rochsun[3B-D], Susilo Bekti[4B-D], Ririn Dwi Agustin[5B-D]
budiwahyonouibu@gmail.com[1*]

Next in the table analysis, research data correlation obtained coefficient correlation motivation to learn to learning outcomes Physical education and health $_{count}$(0.353) with t $_{count}$ = 3.33 > t $_{table}$ = 1.6 6 state that learning motivation contributes to learning outcomes. Study Physical Education and Health student Class VII of SMP Negeri 1 Tembilahan Hulu, Indragiri Hilir Regency. Analysis Correlation X $_3$ against Y can see attachment 16 page 2 85.

Table 26.
Analysis Correlation X $_3$ against Y

Correlation Between	r	r ^{2}	Coefficient of Determination	t $_{count}$	t $_{table}$ α = 0.05	Conclusion
X $_3$ against Y	0.353	0.124	12.4%	3.33	1.6 6	Positive Relationship

To see the connection, pure X $_3$ with Y controlled by X $_1$ is done analysis partial correlation. In the table analysis correlation partial research data obtained coefficient correlation i motivation to learn to learning outcomes Physical Education and Health controlled by physical fitness r $_{count}$(0.588) with t $_{count}$ = 3.33 > t $_{table}$ = 1.6 6 state that There is a positive relationship between X $_3$ and Y when controlled by X_1. It means that the variables motivation to learn as *independent* variables contribute as big as 34.57 % against the *dependent* variable, namely the results Study on Physical Education and Health, student Class VII of SMP Negeri 1 Tembilahan Hulu, Indragiri Hilir Regency. Analysis Correlation Partial X $_3$ on Y is controlled by X $_1$ can See attachment 18, page 296.

Table 27.
Analysis Correlation Partial X $_3$ on Y is controlled by X $_1$

Correlation Between	r	r ^{2}	Coefficient of Determination	t $_{count}$	t $_{table}$ α = 0.05	Conclusion
X $_3$ on Y is controlled by X $_1$	0.444	0.345	34.57%	4.35	1, 6 6	Positive relationship

The Contribution of Physical Fitness, Facilities and Infrastructure, and Learning Motivation to the Physical Education and Health Learning Outcomes of Class Students VII State Junior High School 1, Tembilahan Hulu, Indragiri Hilir Regency

The hypothesis proposed and formulated is as follows: physical fitness, infrastructure and learning motivation together contribute to the learning outcomes of physical education and health of class VII students of SMP Negeri 1 Tembilahan Hulu, Indragiri Hilir Regency. Testing hypothesis fourth. This uses multiple regression analysis and correlation. Based on the results calculation produces value a = 16.58, b_1 = 0.8947, b_2 = 0.2093 b $_3$ = 0.2039, against this equality regression of Y on X1, X2, and X_3 is $\hat{Y}$ = 16.58 - 0.8947 X1 -0.2093 X_2 - 0.2039 X_3. For testing the significance of equality regression double for the variable Y, using used ANOVA table. For more to be clear, can be seen in the 15-page appendix 276, and its summary can be seen in the table following :

Table 28.
ANOVA Test Significance Multiple Regression $\hat{Y}$ = 16.58 - 0.8947

Source of Variation	dk	JK	RJK	F $_{count}$	F $_{table}$ α = 0.05
Regression	3	1121.65	373.88	12.40	2.72
Remainder	76	2475.55	32.57		

Budi Wahyono[1A-E*], Ahmad Lani[2B-D], Rochsun[3B-D], Susilo Bekti[4B-D], Ririn Dwi Agustin[5B-D]
budiwahyonouibu@gmail.com[1*]

Based on Table, can significance test explained the regression double obtained F_{count} 12.40 > F_{table} 2,72. This means equality regression double $\hat{Y}$ = 16.58 - 0.8947 is significant. Thus so can be concluded that physical fitness, infrastructure and learning motivation, in a way, together make a contribution to results. Study Physical Education and Health student class VII State Junior High School 1 Tembilahan Hulu, Indragiri Hilir Regency.

Furthermore, based on the strength connection of 0.574 , Then to mark correlation coefficient This is testing the significance of correlation X_1, X_2, X_3 against Y using the F distribution, The results are calculation and can be seen in the attachment 17 pages 29.

Table 29.
Significance Test Correlation X_1, X_2, X_3 against Y

Correlation between	r	r^2	Coefficient of Determination	F_{count}	F_{table} $\alpha = 0.05$	Conclusion
X1, X2, X3 against Y	0.574	0.329	32.9%	12.44	2.89	Positive Relationship

Based on the correlation significance test between the physical fitness pair (X_1), infrastructure (X2), learning motivation (X3) on the learning outcomes of Physical Education and Health (Y) of class VII students of SMP Negeri 1 Tembilahan Hulu, Indragiri Hilir Regency as seen in the table, the $_{calculated\ F}(12.44) > F_{table}(2.89)$ at a significance level of α = 0.05. Based on the test results above, it can be concluded that physical fitness, infrastructure and learning motivation together contribute to the learning outcomes of Physical Education and Health of class VII students of SMP Negeri 1 Tembilahan Hulu, Indragiri Hilir Regency.

Discussion

The Contribution of Physical Fitness to the Physical Education and Health Learning Outcomes of Grade VII Students of SMP Negeri 1 Tembilahan Hulu, Indragiri Hilir Regency

In the first hypothesis test, there is a contribution of physical fitness to the learning outcomes of class VII students at SMP Negeri 1 Tembilahan Hulu, Indragiri Hilir Regency. This is supported by the partial correlation coefficient, which reaches a value as significant as 0.792. Physical fitness has a significant impact on the learning outcomes achieved by students in Physical Education and Health.

For known relationships between variables, where scores on one variable can be used to predict scores on another variable, other analyses, such as linear regression, are commonly employed. From the results analysis, the equality regression is $\hat{Y}$ = 61.30 + 1.16X. Equation model regression. Indicates that if physical fitness improves by one score, then the tendency of learning outcomes improves by as much as 1.16 at a constant of 61.30.

The research conducted by (Aryadi, 2020) had a significant influence on direct physical fitness results, as indicated by a study in Physical Education and Health, with a correlation coefficient of 0.621. This indicates that 62.1% of physical fitness is influential in achieving results, in the Study of Physical Education and Health. This aligns with the

(Reginald et al., 2025) that physical fitness, one of its functions, enables students to enhance their academic performance.

Research conducted by (Rosmi, 2016) shows that studying Physical Education and Health can build and improve the character of the students. For values (attitude-mental-emotional-spiritual-social), and guide students to achieve a commendable appearance. (2) b learning Physical Education and Health can increase the fitness of students, so that students' own ability to do daily tasks without causing significant fatigue. (3) There is a significant relationship between character and quality fitness physique of participants educated through learning Physical Education and Health. Students who possess good character and are involved in extracurricular activities tend to excel in these areas, and always Approach Physical and Health Education in an active manner.

Likewise, in the learning process carried out by a student at school, especially in the subject of Physical Education and Health, which is known to require good physical fitness. If the student is not physically fit, it will be difficult for him to follow the Physical Education and Health learning process. Conversely, if the student is fit and has good physical fitness, they will consistently follow the learning process and obtain satisfactory grades. As we know, in Physical Education and Health learning, almost all the material requires students to perform movements and exercises (Rahman et al., 2023). One example of such material is a big ball game.

A fit person refers to someone healthy in a dynamic sense, with healthy dynamic support for physical and psychological activity (Yeh et al., 2016). Therefore, a student with good physical condition can engage in daily physical activity for a relatively long time (Chen et al., 2018), without experiencing excessive fatigue , and still enjoy their free time with practical and impactful activities that positively contribute to improvement in study performance.

Contribution of Facilities and Infrastructure to Physical Education and Health Learning Outcomes of Class VII Students of SMP Negeri 1 Tembilahan Hulu, Indragiri Hilir Regency

In the second hypothesis test, there is a contribution of infrastructure facilities to the learning outcomes of Physical Education and Health students of class VII of SMP Negeri 1 Tembilahan Hulu, Indragiri Hilir Regency. This is supported by the partial correlation coefficient of 0.444. Facilities and infrastructure have a significant influence on the Physical Education and Health learning outcomes achieved by students. For now, known contributions between variables, where scores on one variable can be used to predict scores on other variables, can be demonstrated through simple linear regression analysis. From the results analysis, the equality regression equation is $\hat{Y} = 44.70 + 0.29X$. Equation model regression. Indicates that if infrastructure improves by one score, then the tendency to increase learning outcomes is as significant as 0.29 at a constant of 44.70.

A study by (Ahmanda et al., 2024) shows that the available infrastructure in education can create an active learning process with a significant and positive impact on teacher performance and academic achievement of students. The research conducted

there (Pratama et al., 2023) reveals a significant relationship between infrastructure and performance in Physical Education and Health, which accounts for 47.0%. Research conducted by (Pratama et al., 2023) demonstrated a positive effect of learning facilities on student achievement of 16%. Research conducted by (Abdillah et al., 2025) demonstrated a significant effect of sports facilities on student learning outcomes, as evidenced by a 1.60% increase.

The physical education and health learning process is supported by adequate infrastructure, enabling students and teachers to utilize these resources effectively and optimally. These students will undoubtedly feel happy and even satisfied with the facilities available at their school. Own means infrastructure that fulfils the standard so the child or student can develop their wish. Keep going, try the sport they like. Good infrastructure plays a crucial role in enhancing study outcomes (Kaputri et al., 2024). Therefore, providing physical infrastructure for education is ideal, considering the number of students, as this will enable effective and efficient learning. However, on the contrary, the lack of educational infrastructure, non-ideal physical facilities, and inadequate learning resources, including Physical Education and Health, will hamper practical learning and result in wasted time.

Therefore, physical education and health teachers should utilize the school's facilities and infrastructure, whether in a large field or just in the schoolyard, to facilitate the learning process. Teaching can be implemented with maximum effectiveness in accordance with objective learning.

Contribution of Learning Motivation to the Physical Education and Health Learning Outcomes of Class VII Students of SMP Negeri 1 Tembilahan Hulu, Indragiri Hilir Regency.

In the third hypothesis test, there is a contribution of learning motivation to the learning outcomes of class VII students of SMP Negeri 1 Tembilahan Hulu, Indragiri Hilir Regency. This is supported by the partial correlation coefficient of 0.588. Learning motivation has a significant influence on the learning outcomes of students in Physical Education and Health. To determine the contribution of variables, where scores on one variable can be used to predict scores on other variables, a simple linear regression analysis was conducted. The analysis yielded a regression equation of $\hat{Y} = 44.93 + 0.26X$. The equation model regression. This means that if motivation to learn improves by one score, then the tendency for learning outcomes in Physical Education and Health increases by as much as 0.26, holding a constant value of 44.93.

The results of research conducted by (Kesuma et al., 2021)regarding learning motivation and its impact on student learning achievement. The research results indicate that learning motivation has a positive and significant impact on student learning achievement. Research conducted by Bakar (2014:729): (1) overall student learning motivation is in the high category, (2) productive student competencies are in the good category, (3) there is a positive influence of learning motivation on productive competencies, with a determination coefficient of 0.115.

Furthermore, the results of the research were influenced by the Motivation Study, which had a direct impact on the results of the Study on Badminton Physical Education (Ibrohim et al., 2024). Building on findings from existing research, there is a significant influence between motivation and study results in Physical Education and Health. Motivation studies have a closer relationship to the assessment of cognitive (intelligence) skills compared to the evaluation of psychomotor (movement) skills. To create strong motivation for learning, teachers must be capable of selecting appropriate learning strategies that cater to both the message conveyed and the abilities of each student. Through the right strategy, students will be driven and enthusiastic in learn. The taller the motivation of a Study student, the greater their contribution to the results of the Study in Physical Education. This is achieved with a method that truly suits high achievers.

The Contribution of Physical Fitness, Facilities and Infrastructure, and Learning Motivation to the Physical Education and Health Learning Outcomes of Class Students VII State Junior High School 1, Tembilahan Hulu, Indragiri Hilir Regency.

In the fourth hypothesis test, physical fitness, infrastructure, and learning motivation jointly contributed to the learning outcomes of seventh-grade students of SMP Negeri 1 Tembilahan Hulu, Indragiri Hilir Regency. This was supported by a correlation coefficient of 0.574. To determine the contribution of variables, where the score on one variable can be used to predict the score on another variable, a simple linear regression analysis was conducted. From the results analysis obtained, the equality regression equation is $\hat{Y}$ = 16.58 - 0.8947 X1 - 0.2093 X2 - 0.2039 X3. Equation model regression. This means that if physical fitness, infrastructure suggestions, and learning motivation improved by one score, then the tendency learning outcomes would be 0.8947 at X 1, -0.2093 at X 2, and 0.2039 at X 3, at a constant of 16.58.

The study results (Osrita et al., 2020) demonstrated that physical fitness, infrastructure, and learning motivation all influenced the learning outcomes in Physical Education and Health. Next, there are influencing factors on performance Study, among them are educators, students, and the educational environment that reflects cultural competence. Educator factors can be seen as factors that contribute to performance, while factors studied include physical fitness, motivation, and discipline. Environmental factors can be seen in facilities that support the implementation of internship programs, as well as parental support (Kusuma Jaya et al., 2021).

Physical fitness, infrastructure, and learning motivation are essential to support the teaching and learning process in schools, thereby significantly contributing to the physical education and health learning outcomes of seventh-grade students at SMP Negeri 1 Tembilahan Hulu, Indragiri Hilir Regency. Means that students who have high physical fitness will reflect on themselves and follow learning. Shiva will be capable of following in learning Physical Education and Health without fat, and will still be able to participate in activities after completing the course. Fitness is physical, but it takes a short time to create, but requires a long time for the body to adapt to conditions that are

Budi Wahyono[1A-E*], Ahmad Lani[2B-D], Rochsun[3B-D], Susilo Bekti[4B-D], Ririn Dwi Agustin[5B-D]
budiwahyonouibu@gmail.com[1*]

not easy, making it tiring to perform activities for optimal and maximum results. Students who have access to good infrastructure are likely to achieve good results in Physical Education, Sports, and Health. In contrast, those with minimal infrastructure are likely to achieve either good or poor results in Physical Education. To improve student learning outcomes, the use of infrastructure should be maximized to enhance results in Physical Education (Woods-Townsend et al., 2021).

Students who have the motivation to study a high level of physical education and health will be able to reach their goals and achieve maximum results in Physical Education and Health. At the same time, students who have a low motivation to study physical education and health may not like the Physical Education and Health lesson. It can be said that if someone has good physical fitness, adequate facilities and infrastructure, and high motivation for learning, then it will have a positive influence on the learning results of physical education and health students.

CONCLUSION

Based on the results of the data analysis and discussion presented in the previous chapter, it can be concluded that there is a positive and significant relationship between physical fitness, infrastructure, and learning motivation, as well as their impact on the learning outcomes of seventh-grade students at SMP Negeri 1 Tembilahan Hulu. Partially, physical fitness contributes 20%, infrastructure 10.5%, and learning motivation 12.4% to learning outcomes. Simultaneously, these three variables contribute 32.9% to improving learning outcomes in Physical Education. It is recommended that students improve their motivation and physical fitness, teachers develop engaging learning strategies, parents and principals strengthen support and facilities for Physical Education, and further researchers examine other factors that influence learning outcomes.

ACKNOWLEDGMENT

The researcher would like to express sincere gratitude to Allah SWT for His blessings and guidance throughout the completion of this thesis entitled "The Contribution of Physical Fitness, Facilities and Infrastructure, and Learning Motivation to the Physical Education and Health Learning Outcomes of Grade VII Students of SMP Negeri 1 Tembilahan Hulu, Indragiri Hilir Regency." Special appreciation is extended to Dr. Ahmad Lani**,** as the main supervisor, and Dr.Rochsun**,** for their invaluable guidance, constructive suggestions, and continuous encouragement during the research and writing process. The researcher also conveys deep gratitude to the Principal and Physical Education teachers of SMP Negeri 1 Tembilahan Hulu, as well as the participating students, for their cooperation and support in data collection.

Heartfelt thanks are also due to the researcher's beloved family**,** for their endless prayers, patience, and motivation, and to all friends and colleagues in the Faculty of Sports Education**,** who provided inspiration and moral support throughout this journey.

Finally, the researcher hopes that this thesis will contribute to improving the quality of Physical Education learning and serve as a valuable reference for further research in the field of sports education.

REFERENCES

Abdillah, M. R., Firmansyah, A. T., & Wiguna, C. (2025). Pengelolaan Sarana Prasarana Pembelajaran Pendidikan Jasmani Dalam Meningkatkan Hasil Belajar Peserta Didik (Studi Kasus di SMK LPS 1 Ciamis). 11, 13–24.

Ahmanda, N., Aluwis, & Putra, R. (2024). Hubungan Sarana Dan Prasarana Dengan Hasil Belajar Pjok Siswa Smp Negeri 2 Tambusai. Jurnal Pendidikan Jasmani, Kesehatan, Dan Rekreasi, 2(2), 30–37. https://doi.org/10.59584/jurnalpjkr.v2i2.74

Amrulloh, A., Aliyah, N. darajaatul, & Darmawan, D. (2024). Pengaruh Kebiasaan Belajar, Lingkungan Belajar Dan Motivasi Belajar Terhadap Prestasi Belajar Siswa MTS Darul Hikmah Langkap Burneh Bangkalan. AL-MIKRAJ Jurnal Studi Islam Dan Humaniora (E-ISSN 2745-4584), 5(01), 188–200. https://doi.org/10.37680/almikraj.v5i01.5656

Aryadi, D. (2020). Pengaruh Motivasi Belajar, Perhatian Orang Tua, Dan Kebugaran Jasmani Terhadap Hasil Belajar Pendidikan Jasmani Olahraga Dan Kesehatan. Jurnal Pendidikan Dasar Setiabudhi, 4(1), 52–62.

Chen, W., Hammond-Bennett, A., Hypnar, A., & Mason, S. (2018). Health-related physical fitness and physical activity in elementary school students. BMC Public Health, 18(1), 1–12. https://doi.org/10.1186/s12889-018-5107-4

Dudley, D., Mackenzie, E., Van Bergen, P., Cairney, J., & Barnett, L. (2022). What Drives Quality Physical Education? A Systematic Review and Meta-Analysis of Learning and Development Effects From Physical Education-Based Interventions. Frontiers in Psychology, 13(June), 1–20. https://doi.org/10.3389/fpsyg.2022.799330

Fajar Sidik Siregar, Riska Sri Pratiwi Tambunan, Febri Deasari Simamora, Delima Situmorang, & Karina Sitorus. (2024). Analisis Peran Sarana dan Prasarana dalam Proses Pendidikan Jasmani dan Keolahragaan di Sekolah Dasar. Jurnal Pendidikan, Bahasa Dan Budaya, 3(4), 157–167. https://doi.org/10.55606/jpbb.v3i4.4639

Herdiansyah, H., Meilana, A., Carsiwan, C., & Susilawati, D. (2024). Erikson's Development Psychosocial Theory In The 21st Century: A Pedagogical Perspective In Physical Education. COMPETITOR: Jurnal Pendidikan Kepelatihan Olahraga, 16(2), 362. https://doi.org/10.26858/cjpko.v16i2.63045

Ibrohim, I., Muhtar, T., & Sudrazat, A. (2024). The Influence of the Sport Education (SE) Learning Model And The Student Team Achievement Division (STAD) Learning Model On Student Motivation In Badminton. COMPETITOR: Jurnal Pendidikan Kepelatihan Olahraga, 16(2), 320. https://doi.org/10.26858/cjpko.v16i2.61827

Irawan, D. C., Aziz, M. Z., & Wibisono, I. G. A. B. (2024). Hubungan antara motivasi siswa dengan efektivitas pembelajaran pada mata pelajaran pendidikan jasmani olahraga dan kesehatan. Jurnal Olahraga Pendidikan Indonesia (JOPI), 3(2), 105–115. https://doi.org/10.54284/jopi.v3i2.303

Kaputri, D. R., Putra, M. A., & Manurizal, L. (2024). A Survey Of Facilities and Infrastructure For Physical Education, Sports, and Health At Junior High Schools In Rambah Samo Sub-District, Rokan Hulu District. COMPETITOR: Jurnal Pendidikan Kepelatihan Olahraga, 16(3), 694. https://doi.org/10.26858/cjpko.v16i3.65567

Kesuma, I. Ny. A. A., Yoda, I. K., & Hidayat, S. (2021). The Influence of Learning Models and Motivation on Physical Education Learning Outcomes in Junior High School Students. Jurnal Penjakorab, 8(April), 62–70.

Kurniawan, R. (2016). Analisis Regresi. Kencana Prenada Media. https://books.google.co.id/books?id=KcY-DwAAQBAJ

Kusuma Jaya, K. S., Kanca, I. N., & Semarayasa, I. K. (2021). Survei Ketersediaan Guru, Sarana dan Prasarana Penunjang Pembelajaran Pendidikan Jasmani Olahraga dan Kesehatan. Indonesian Journal of Sport & Tourism, 3(1), 18. https://doi.org/10.23887/ijst.v3i1.35431

Marani, I. N., Muhyi, M., & Ginanjar, S. (2024). Aspek Pembelajaran Dan Metode Belajar Pendidikan Jasmani, Olahraga Dan Kesehatan. In Akademia ... (Vol. 2, Issue January). https://www.researchgate.net/profile/Eka-Novita-Sari/publication/378151948_eBook_J_-_Aspek_Pembelajaran_dan_Metode_Belajar_Pendidikan_Jasmani_Olahraga_dan_Kesehatan/links/65ca97661e1ec12eff8a699d/eBook-J-Aspek-Pembelajaran-dan-Metode-Belajar-Pendidikan-Ja

Nasution, M. C., & Syaleh, M. (2021). Analisis Faktor-Faktor yang Mempengaruhi Hasil Belajar PJOK pada Siswa Kelas V SD Negeri 104259 Citaman Jernih Kecamatan Perbaungan Kabupaten Serdang Bedagai Tahun Ajaran 2020/2021. JOSEPHA: Journal of Sport Science And Physical Education, 2(2), 1–10. https://doi.org/10.38114/josepha.v2i2.156

Nurhayati, N., Lestari, T., Win Afgani, M., & Isnaini, M. (2025). Correlational Research (Penelitian Korelasional). Jurnal Cendekia Ilmiah, 4(3), 8–2.

Osrita, G., Welis, W., Rasyid, W., Zarya, F., & Ichsan, M. (2020). Pengaruh Status Gizi, Kebugaran Jasmani , Motivasi Belajar Terhadap Hasil Belajar PJOK SD. Jurnal Pendidikan Jasmani Indonesia, 16(2), 224–239.

Pratama, R. Y., Sulastio, A., & Agust, K. (2023). Hubungan Sarana Prasarana Dan Proses Pembelajaran Dengan Hasil Belajar Olahraga Di Sma Negeri 16 Pekanbaru. Riyadhoh : Jurnal Pendidikan Olahraga, 6(1), 88. https://doi.org/10.31602/rjpo.v6i1.9948

Rahman, M. A., Nanik Indahwati, & Novilia Puspa Widiyanti. (2023). Penerapan Strategi Pembelajaran Berdiferensiasi Dalam Meningkatkan Hasil Belajar Siswa Materi Pola Gerak Dominan. Jurnal Mahasiswa Pendidikan Olahraga, 3(2), 192–201. https://doi.org/10.55081/jumper.v3i2.986

Reginald, W. A. R. S. P. M. Y. Z. R. H. N. E. P. D. P. M. M. K. J. M. N. M. A. M. S. I. R., Astuti, N. D., & Hapsan, A. (2025). TES PENGUKURAN DALAM PENDIDIKAN JASMANI DAN OLAHRAGA. CV. Ruang Tentor. https://books.google.co.id/books?id=cNRFEQAAQBAJ

Rosmi, Y. F. (2016). Pendidikan Jasmani Dan Pengembangan Karakter Siswa Sekolah Dasar. Wahana, 66(1), 55–61. https://doi.org/10.36456/wahana.v66i1.482

Saitya, I., & Muhadi, M. (2025). Revitalisasi Pendidikan Jasmani Menuju Indonesia Emas. Jurnal Pendidikan Olahraga, 15(1), 27–31. https://doi.org/10.37630/jpo.v15i1.2551

Satin, P. M., Yohanis M. Mandosir, Irmanto, M., Susanto, I. H., & Kristanto, B. (2021). Hubungan Antara Status Gizi, Aktifitas Fisik Terhadap Tingkat Kebugaran Jasmani Siswa. Jurnal Pendidikan Olahraga Dan Kesehatan, 4(2), 516–521. https://journal.unesa.ac.id/index.php/IJOK/article/viewFile/10968/5036

Sugiyono. (2020). Metodologi Penelitian Kuantitatif, Kualitatif dan R&D.

Woods-Townsend, K., Hardy-Johnson, P., Bagust, L., Barker, M., Davey, H., Griffiths, J., Grace, M., Lawrence, W., Lovelock, D., Hanson, M., Godfrey, K. M., & Inskip, H. (2021). A cluster-randomised controlled trial of the LifeLab education intervention to improve health literacy in adolescents. PLoS ONE, 16(5 May), 1–17. https://doi.org/10.1371/journal.pone.0250545

Yeh, H. P., Stone, J. A., Churchill, S. M., Wheat, J. S., Brymer, E., & Davids, K. (2016). Physical, Psychological and Emotional Benefits of Green Physical Activity: An Ecological Dynamics Perspective. Sports Medicine, 46(7), 947–953. https://doi.org/10.1007/s40279-015-0374-z