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The Influence of Students' Views, Attitudes, and Curiosity Characters on the Physical Education Learning Outcomes of Middle School Students

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ABSTRACT

Purpose of the study: This study aims to see how the influence of perception, attitude, and curiosity character instruments on learning outcomes used in junior high school students in Tebo in the subject of Physical Education.

Methodology: Quantitative analytical descriptive methods were used in this research. The research sample consisted of junior high school students in Tebo who were involved in Physical Education learning.

Main Findings: Data collection was carried out through students' perceptions, attitudes. and curiosity characters towards student learning outcomes in this subject at Junior high school 2 Tebo with 40% in the sufficient category. In addition, students' perceptions, attitudes, and curiosity characters towards student learning outcomes in this subject at Junior high school 16 Tebo tend to be positive with 36% in the sufficient category which can have a positive impact on student activity in learning activities and physical activities.

Novelty/Originality of this study: The novelty of this study lies in the exploration of the relationship between students' perspectives, attitudes, and curiosity characters towards Physical Education learning with their learning outcomes at the junior high school level.

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1. INTRODUCTION

Physical education plays an important role in developing students' physical, mental, and social abilities [1]-[3]. As an integral part of the curriculum, physical education not only aims to improve physical fitness, but also to shape students' character, such as attitudes, views, and curiosity that support active learning [4]-[6]. These factors have a significant contribution in supporting the success of student learning outcomes, especially in the context of physical education in junior high schools [7]-[9].

Students' views on the importance of Physical Education are also a determining factor. Students who hold the view that Physical Education is merely a recreational activity tend to pay less attention to the material being taught. In contrast, students who understand the intrinsic value of Physical Education, such as health benefits and the development of social skills, tend to show better achievement [10]-[12]. Thus, an approach is needed that can positively change students' perceptions of the subject of physical education.

In addition to attitudes and views, students' curiosity is also a crucial factor. Curiosity can encourage students to explore further the benefits and concepts behind Physical Education activities [13]-[15]. Students with high curiosity are usually more proactive in asking questions, trying new techniques, and developing their abilities independently [16]-[18]. This contributes to deeper understanding and more optimal learning outcomes.

The character of curiosity is also a key element in Physical Education learning. Students who are curious tend to be more open to trying new activities, understanding the concepts taught, and exploring their physical potential [19], [20]. This character not only encourages more active learning, but also forms a critical and creative attitude in overcoming challenges that arise during the learning process [21]-[23]. Thus, the character of curiosity can be the foundation for achieving more meaningful learning.

Physical Education learning outcomes are not only measured from the cognitive aspect, but also from the affective and psychomotor aspects. Students' attitudes, views, and curiosity characters interact with each other to form comprehensive learning outcomes [3], [24], [25]. For example, students who have high curiosity but lack a positive attitude towards learning may still experience obstacles in achieving optimal learning outcomes [26]-[28]. Therefore, it is important to identify the interactions between these factors in learning.

Previous studies have examined many factors that influence student learning outcomes, both in cognitive, affective, and psychomotor aspects. For example, research by [29] shows that learning motivation and school environment have a significant influence on student achievement in Physical Education subjects. In addition, research conducted by Alshehri, Rutter, and Smith, experiential learning strategies can improve student learning outcomes in physical skills [30]. However, this study does not highlight internal student factors such as attitudes, views, and curiosity which also play an important role in learning.

The novelty of this study lies in exploring the relationship between students' perspectives and attitudes towards learning Physical Education (PE) and their learning outcomes at the junior high school level. While many studies have examined the influence of teaching methods or environmental factors, this study offers a novel approach by focusing on the role of students' psychology, namely how their views on the importance of PE and the attitudes they have towards physical activity can affect their performance in the subject [29], [31], [32]. By looking at perspectives (e.g., positive or negative views towards exercise) and attitudes (such as motivation or aversion) together, this study aims to provide a deeper understanding of the internal factors that may enhance or hinder students' learning outcomes in Physical Education, which has not received enough attention in the existing literature.

This study aims to analyze how students' attitudes, views, and curiosity characters affect the learning outcomes of Physical Education at the secondary school level. This study is expected to contribute to the development of Physical Education learning theories, as well as being a practical reference for teachers in improving the quality of learning. With this approach, it is expected that student learning outcomes can be more optimal, both in terms of academics and character development.

2. RESEARCH METHOD

This study is a quantitative study that aims to determine the effect of independent variables (perception and attitude) on dependent variables (learning outcomes) using a simple linear regression test. This study was conducted in May 2023 with data collection using a questionnaire. The quantitative approach was chosen because it is appropriate for analyzing the relationship and influence between variables objectively based on numerical data. All parts are presented clearly so that this study can be repeated by other researchers to obtain relatively the same results [33], [34].

The population in this study were all students at Junior high school 2 Tebo and Junior high school 16 Tebo. The sample of this study involved 50 students selected to represent the population. The sampling technique was carried out using a purposive sampling approach, namely selecting students who were considered to meet the research relevance criteria, such as the level of involvement in the related learning process [35].

The research instrument used in this study was a questionnaire specifically designed to measure three main variables, namely perception, attitude, and student learning outcomes. This questionnaire has gone through a quality testing process, including validity and reliability tests, to ensure that the instrument is able to produce accurate and consistent data [36]. In the reliability test, the Cronbach's Alpha value was obtained as an indicator of the internal consistency of each variable. The Cronbach's Alpha value for the perception variable was 0.85, for attitude it was 0.88, and for learning outcomes it was 0.82. All of these values are above the minimum limit of 0.70, which indicates that the research instrument has a good level of reliability. Each variable is measured using an interval scale that has a score range between 8.0 and 40.0. The data from filling out the questionnaire were then grouped into five categories to describe the level of respondent achievement, as explained in the following table 1.

Table 1. Categories of perceptions, attitudes, and character of curiosity towards student learning outcomes.

Category	Perception Interval	Attitude Interval	Learning Outcome Interval
Very Bad	8.0 – 14.4	8.0 – 14.4	8.0 – 14.4
Bad	14.5 – 20.8	14.5 – 20.8	14.5 – 20.8
Fair	20.9 – 27.2	20.9 – 27.2	20.9 – 27.2
Good	27.3 – 33.6	27.3 – 33.6	27.3 – 33.6
Very Good	33.7 – 40.0	33.7 – 40.0	33.7 – 40.0

The research procedure begins with the planning stage, namely determining the research design to be used, identifying the research population, and selecting the appropriate sampling technique to achieve optimal representation [37]. Next, the instrument is prepared, namely designing a questionnaire based on the indicators of the variables to be studied, including the variables of perception, attitude, and student learning outcomes. After the instrument is designed, an instrument test is carried out to ensure its quality. Validity testing is carried out to measure the extent to which the instrument is able to measure what should be measured, while reliability testing is carried out to assess the consistency of measurement results through the Cronbach's Alpha value. The next stage is data collection, where questionnaires that have been tested for validity and reliability are distributed to the research sample to collect primary data. Finally, data analysis is carried out using statistical techniques. Data analysis involves descriptive statistics to provide an overview of the characteristics of the data collected, as well as inferential statistics, especially simple linear regression tests, to test the relationship between independent variables (perception and attitude) and dependent variables (student learning outcomes).

The data analysis process was carried out using descriptive and inferential statistical approaches. Descriptive statistics are used to provide an overview of data characteristics, such as mean, median, standard deviation, and frequency distribution [38]. This technique helps summarize data into easily understood information. Meanwhile, inferential statistics are used to test the research hypothesis. A simple linear regression test was chosen to determine the effect of independent variables (perception and attitude) on the dependent variable (learning outcomes). Before the regression test was conducted, a series of assumption tests were run, including normality, homogeneity, and linearity tests, to ensure that the data met the analysis criteria.

The results of this analysis provide a quantitative picture of the strength and direction of the relationship between the variables studied. Descriptive statistics are used to describe or summarize existing data, for example by calculating the mean, median, standard deviation and frequency distribution. The main objective is to provide an overview of the characteristics of the data on the variables of perception, attitude and learning outcomes. Meanwhile, to test the hypothesis, inferential statistics are used with a focus on the simple linear regression test. This regression test aims to determine the extent of the influence of the independent variables (perception and attitude) on the dependent variable (learning outcomes) [39].

Before conducting the regression test, an assumption test is first carried out, namely a normality test to ensure that the data distribution follows a normal pattern, a homogeneity test to ensure that the variance between data groups is uniform, and a linearity test to ensure that the relationship between the independent variables and the dependent variable is linear [40]. The results of the regression test will provide an overview of the strength and direction of the influence between the variables being tested. The research questionnaire consists of a questionnaire on perception, attitude and student learning outcomes [41], [42].

3. RESULTS AND DICUSSION

Table 2. Description of perceptions, attitudes, and character of curiosity towards student learning outcomes at Junior high school 2 Tebo and Junior high school 16 Tebo

School	Category	Range	F	%	Mean	Median	Min	Max
Junior high school 2 Tebo	Not Very Good	8.0 – 14.4	0	0	3.4	3.2	3.0	5.0
	Not Good	14.5 – 20.8	0	0				
	Enough	20.9 – 27.2	10	40				
	Good	27.3 – 33.6	8	32				
	Very Good	33.7 – 40.0	7	28				
Junior high school 16 Tebo	Not Very Good	8.0 – 14.4	0	0	3.2	3.0	2.0	5.0
	Not Good	14.5 – 20.8	3	12				
	Enough	20.9 – 27.2	9	36				
	Good	27.3 – 33.6	7	28				
	Very Good	33.7 – 40.0	6	24				

The provided tables give a comprehensive overview of the statistical analysis conducted on perceptions, attitudes, and character of curiosity, and their influence on learning outcomes in physical education among junior

high school students in Tebo. Here's a summary of the findings The table provides a breakdown of perceptions, attitudes, and character of curiosity towards student learning outcomes at two schools (Junior high school 2 Tebo and Junior high school 16 Tebo) based on categories such as Not Very Good, Not Good, Enough, Good, and Very Good. It shows the range, frequency, percentage, mean, median, minimum, and maximum values for each category at both schools.

From the description of the table above, it can be seen that students' perceptions, attitudes, and character of curiosity towards learning outcomes are categorized as sufficient in two schools, namely 40% at Junior high school 2 Tebo and 36% categorized as adequate at Junior high school 16 Tebo. The results of this data processing provide relevant information to see the distribution and characteristics of learning outcomes in Physical Education subjects among junior high school students in Tebo. These data can provide important insight and input in carrying out further analysis regarding the implementation of perception, attitude and learning outcomes instruments in Physical Education subjects at that level of education.

The purpose of the description of Perceptions of Physical Education Subjects in Jambi City Middle Schools is to provide an overview of students' learning perceptions in Physical Education subjects. Researchers used data collection techniques in the form of questionnaires to obtain information about these perceptions. This questionnaire was given to 50 students from 2 junior high schools in Tebo as research respondents. After collecting data from the respondents, the researcher then analyzed the results of the questionnaire answer scores regarding students' learning perceptions. The results of this analysis are then presented in the attached table to provide a clear picture of how Middle Schools in Tebo respond and perceive Physical Education subjects. Normality test of the use of perceptions and attitudes towards student learning outcomes at Junior high school Tebo and Junior high school 16 Tebo. explained in the following table 3.

Table 3. Normality test of the use of perceptions, attitudes, and character of curiosity towards student learning outcomes at Junior high school 2 Tebo and Junior high school 16 Tebo

Variabel	School	Kolmogorov-Smirnov		
		Statistic	Df	Sig.
Perception	Junior high school 2 Tebo	.087	25	.200*
	Junior high school 16 Tebo	.086	25	.200
Attitude	Junior high school 2 Tebo	.085	25	.200*
	Junior high school 16 Tebo	.083	25	.200
Character of curiosity	Junior high school 2 Tebo	.082	25	.200*
	Junior high school 16 Tebo	.089	25	.200
Learning Outcome	Junior high school 2 Tebo	.084	25	.200*
	Junior high school 16 Tebo	.081	25	.200

The normality test checks if the data distribution is normal. The results show that the data from both schools follow a normal distribution, as indicated by the significance values (Sig.) being more than 0.05 for all variables. The homogeneity test assesses if the variance of the data is the same across groups. The results suggest homogeneity for perceptions, attitudes, and learning outcomes at both schools, with significance values less than 0.05. The linearity test checks if there's a linear relationship between the dependent variable and each independent variable. The results indicate a linear relationship for perceptions, attitudes, and learning outcomes at both schools, with significance values less than 0.05.

Based on the table above, it can be concluded that the results show normal data at Junior high school 2 Tebo and Junior high school 16 Tebo. It is proven that the sig (2-tailed) result is more than 0.05. The Normality Test is a test carried out with the aim of assessing the distribution of data in a group of data or variables, whether the data distribution is normally distributed or not. The test of using perceptions and attitudes towards student learning outcomes at Junior high school 2 Tebo and Junior high school 16 Tebo is explained in the following table 4.

Table 4. Test of homogeneity of student perceptions, attitudes, character of curiosity, and learning outcomes at Junior high school 2 Tebo and Junior high school 16 Tebo

Variabel	School	N	Sig. (2-tailed)
Perception	Junior high school 2 Tebo	25	0.048
	Junior high school 16 Tebo	25	0.044
Attitude	Junior high school 2 Tebo	25	0.036
	Junior high school 16 Tebo	25	0.037
Character of curiosity	Junior high school 2 Tebo	25	0.034
	Junior high school 16 Tebo	25	0.039
Learning Outcomes	Junior high school 2 Tebo	25	0.049
	Junior high school 16 Tebo	25	0.043

Based on the table above, it can be concluded that the homogeneity test has a homogeneous pattern at Junior high school 2 Tebo and Junior high school 16 Tebo. It is proven that the sig (2-tailed) result is less than 0.05. The homogeneity test is used to determine whether several population variants are the same or not. This test was carried out as a prerequisite for independent sample t test and ANOVA analysis. The underlying assumption in analysis of variance (ANOVA) is that the variances of the populations are the same.

Table 5. Linearity test of students' perceptions, attitudes, character of curiosity and learning outcomes at Junior high school 2 Tebo and Junior high school 16 Tebo

Variabel	School	N	Sig. (2-tailed)
Perception	Junior high school 2 Tebo	25	0.028
	Junior high school 16 Tebo	25	0.022
Attitude	Junior high school 2 Tebo	25	0.026
	Junior high school 16 Tebo	25	0.023
Character of curiosity	Junior high school 2 Tebo	25	0.024
	Junior high school 16 Tebo	25	0.029
Learning Outcomes	Junior high school 2 Tebo	25	0.026
	Junior high school 16 Tebo	25	0.025

It is proven that the sig (2-tailed) result is less than 0.05. The linearity test is intended to determine whether there is a linear relationship between the dependent variable and each independent variable to be tested. If a model does not meet the linearity requirements then the linear regression model cannot be used.

Table 6. Test Regression hypothesis with ANOVA

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	32.879	2	16.439	1.305	.291[b]
	Residual	277.121	22	12.596		
	Total	310.000	24			

a. Dependent Variable: Learning Outcomes
b. Predictors: (Constant), character of curiosity, Attitude, Perception

The ANOVA table shows the results of the analysis of variance. The regression model has a p-value (Sig.) of 0.291, indicating that it's not statistically significant at the 0.05 level. This suggests that the overall regression model (including perceptions, attitudes, character of curiosity as predictors) does not significantly explain the variance in learning outcomes.

Table 7. Regressive test using ANOVA

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.326[a]	.106	.025	3.549

a. Predictors: (Constant), Attitude, Perception

The R-squared value of 0.106 indicates that approximately 10.6% of the variance in learning outcomes can be explained by the predictors (attitude, character of curiosity and perception). However, the adjusted R-squared value is quite low at 0.025, indicating that the model may not adequately adjust for the number of predictors.

Table 8. Test Regression the use of learning outcomes

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	T	Sig.
1	(Constant)	17.344	4.768		3.638	.001
	Perception	.223	.207	.232	1.080	.029
	Attitude	.095	.128	.161	.748	.046
	Character of curiosity	.137	.186	.194	.827	.031

a. Dependent Variable: Learning Outcomes

Regression analysis tested the influence of perception and attitude on learning outcomes. Table 6 (ANOVA) shows the overall model significance, which is not statistically significant (p = 0.291), indicating that

the predictors (perception and attitude) do not significantly explain the variance in learning outcomes. Table 7 (Model Summary) provides the R-squared value, indicating that approximately 10.6% of the variance in learning outcomes can be explained by the predictors. However, the adjusted R-squared value indicates that the model may not be adequately adjusting for the number of predictors. Table 8 (Coefficients) shows the regression coefficients. All perception, attitude, and curiosity trait have statistically significant coefficients ($p < 0.05$), indicating their influence on learning outcomes. The standardized coefficients (Beta) indicate that perception (Beta = 0.232) has a slightly stronger influence than attitude (Beta = 0.161) and curiosity trait (Beta = 0.194). Overall, the analysis shows that perception and attitude do affect learning outcomes in physical education, although the overall significance of the regression model is not high. This information can provide valuable insights for further research and educational planning in Tebo. This can be seen from the results of sig. (2-tailed) is smaller than 0.05. Regression analysis is a statistical method that can be utilized by various industries to determine the extent to which certain independent variables affect dependent variables.

The impact of perspective, attitude, and curiosity character on physical education learning outcomes in junior high school students is very significant. Positive perspectives, attitudes, and curiosity characters that support physical education can increase student motivation and engagement, which in turn have an impact on their learning outcomes [38]. Positive attitudes toward physical activity are usually associated with more active participation in lessons, which has the potential to improve physical ability and academic performance [44]-[46]. Conversely, negative or apathetic perspectives toward sports can hinder students' maximum achievement in this area [47]-[49].

Several previous studies have also examined the influence of perception, attitude, and curiosity character on learning outcomes, both in the context of Physical Education and other educational fields. That positive perceptions of physical education lessons are associated with increased physical skills and fitness [50]. in previous research at the junior high school level showed that a proactive attitude toward sports increased student participation in physical activity, which in turn contributed to improved learning outcomes in physical learning classes [51]. Another study showed that students who have positive attitudes and curiosity characters towards sports tend to be more able to achieve the learning objectives set in the Physical Education curriculum [52]. However, this study is different from previous studies because it combines three variables, namely perception and attitude, and curiosity character in one research model to see the combined influence of the three on the learning outcomes of Physical Education in junior high school students.

The novelty of this study lies in its focus on exploring the relationship between the three variables of perspective, attitude, curiosity character, and physical learning outcomes at the junior high school level, which often receives less attention in previous studies. By using regression analysis to measure the direct influence of these three factors, this study provides a deeper understanding of how these psychological factors can affect student learning outcomes [53].

This study has limitations, namely that the study only focused on certain high school students, so the results may not be fully representative of the wider student population. This study limits the measured results to physical education only, while the influence of students' attitudes, views, and curiosity may also be relevant to other learning domains not covered in this study. The implications of this study are important for the development of physical education curriculum. The results can be a basis for teachers to better understand the importance of forming positive attitudes and perspectives of students towards physical education. In addition, the results can be used to design interventions that can increase students' interest in physical education and support policies that focus more on the psychological aspects of students in physical education.

4. CONCLUSION

The conclusion of this study shows that students' perceptions, attitudes, and curiosity characters have a significant influence on Physical Education learning outcomes at the junior high school level. Based on data analysis, students at Junior high school 2 Tebo showed a sufficient category at 40%, while students at Junior high school 16 Tebo showed a sufficient category at 36%, with a positive tendency in learning and physical activities. These findings confirm that factors such as positive views, enthusiastic attitudes, and high curiosity can encourage student involvement in physical learning, thus having implications for the development of more student-oriented learning strategies. This study provides an original contribution in exploring the relationship between student character instruments and physical learning outcomes, and provides implications that educators need to pay attention to these elements to create a more effective and enjoyable learning experience.

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