THE RELATIONSHIP BETWEEN LEARNING ATTITUDES AND LEARNING OUTCOMES ON THE MATERIAL OF NEWTON'S LAW OF GRAVITY IN PUBLIC HIGH SCHOOL 2 SUNGAI PENUH CITY

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ABSTRACT

The purpose of this study was to determine whether there is a significant relationship between attitudes and learning outcomes in Newton's Law of Gravity material in class XI MIPA 2, XI MIPA 3, and XI MIPA 4 in SMA Negeri 2 Kota Sungai Penuh. This research is quantitative descriptive. The independent variable in this study is the attitude of the students, and learning outcomes are the dependent variable. The population taken was as many as 105 people consisting of class XII MIPA 2, XI MIPA 3, and XI MIPA 4 SMA Negeri 2 Sungai Penuh City and the sample taken was 50 people. Data collection techniques using a questionnaire (questionnaire). Data analysis techniques were carried out including normality test, linearity test, and correlation test with the help of SPSS 21 software. The test results obtained a Pearson correlation value of 0.518, meaning that there is a weak correlation between attitudes and learning outcomes with a Sig. (2-tailed) = 0.00 <0.05 then H0 is rejected, this means that H1 is accepted, that is, there is a significant relationship between attitudes and learning outcomes, although there is a linear correlation but the correlation is weak.
Keywords: Attitudes, Learning Outcomes, Physics

INTRODUCTION

Physics is a science that aims to educate students, so that they can think logically, critically, have an objective nature, discipline in solving problems both in the field of physics, other fields, and in everyday life so that physics needs to be studied and applied. (Purwanto. 2016).

Physics is one of the least favorite subjects for most students. In general, students find many difficulties in learning physics subjects because students have to understand the formulas in physics and apply them in calculations. (Oktaviana. 2016). Students also do not have the willingness to express opinions during the learning process except for students who are smart enough in the class while students who are less accomplished are just silent. Students listen more to the explanation delivered by the teacher (Khodijah. 2016). This is due to students not understanding the physics material given by the teacher, especially if they have to solve physics problems (Mararengga, 2019).

According to (Sulistiodiono, 2017) in the journal (Mararengga, 2019) states that some of the possible problems that cause low student achievement are that some students do not look active in learning, teachers do not motivate students, incomplete learning media, and are less interesting.

According to (Pasaribu, 2017), the problem that often arises in learning in formal education (schools) is the low absorption of students. This can be seen

from the average student learning outcomes which are always still very concerning.

Poor learning attitudes of students indicate poor student initiative in learning, poor student discipline in learning, poor student confidence in learning, and poor student responsibility in learning (Saefullah, 2013). With poor initiative, responsibility, discipline, and confidence in learning, it is believed that it will According to Jihad and, "to obtain learning outcomes, evaluation or assessment is carried out which is a follow-up to measure the level of student mastery" (Kurnia, 2016).

According to Suhendra in (Putra, 2019), teachers' efforts to improve learning outcomes must be assisted by additional activitiesaffect the poor learning outcomes that students will achieve. This can be seen from the poor learning outcomes in the cognitive domain obtained by students, especially in physics subjects.

Cognitive learning aims to improve students' understanding of the concepts learned. Thus concept understanding is part of the learning outcomes in the cognitive domain (Jufrida, 2018).

Learning outcomes are the realization of the achievement of educational goals, so that the learning outcomes measured are highly dependent on the educational goals.

, these efforts are intended to improve the quality of teaching and improve children's ability to understand what is being done. Because students more often take the time to study physics with routine makes him focus and understand the concept. With so much time to study physics, it will have a good impact on student achievement and learning outcomes.

METHODS

This research was conducted at SMAN 2 Kota Sungai Penuh in the odd semester of 2020/2021. The type of research used is Quantitative Research which uses a survey research design. Quantitative research is research that is structured and quantifies data so that data can be used as the result of a study (Hidayaturrahman in Wiza, 2019). This research is conducted by collecting data on an event that has taken place. With this method, data is obtained that provides information or a description and the object under study. This study aims to determine the relationship between learning attitudes and student learning outcomes.

According to Sugiyono (2012: 80) in (Rati, 2015), "population is a generalization area consisting of objects / subjects that have certain qualities and characteristics set by researchers to study and then draw conclusions".

Arikunto (2010: 173) argues that "population is the whole subject of research". In this study, the population taken was 105 people consisting of students in classes XII MIPA 2, XI MIPA 3, and XI MIPA 4 SMA Negeri 2 Kota Sungai Penuh and the sample taken was 50 people. Population is also called the universe, population is not only people, but also objects and other natural objects. Population is also not just the number of objects / subjects studied, but includes all the characteristics possessed by the subject or object. And the sample is part of the

number and characteristics possessed by the population. (Sugiyono, 2011) in (Pradana, 2016).

RESULT & DISCUSSION
Normality Test

According to Pradana (2016), the normality test on the regression model is used to test the normality of the distribution of residual values. Based on the data obtained through the questionnaire, a normality test can be carried out to determine whether the data obtained is normally or abnormally distributed.

Data normality test, using Kolmogorov-Smirnov testing with the criteria if the asymp. Sig (p) > α, then the data distribution is normally distributed. By Sujianto, Agus Eko (2009: 109) in (As'ari, 2018) the guidelines for making normality decisions using the Kolmogorov-Smirnov test in SPSS 16.0 are:

a. Sig or significance value or probability value <0.05 the data distribution is abnormal,

b. Sig or significance value or probability value> 0.05 data distribution is normal.

From the analysis of research data using SPSS 21, it was found that the Sig (2-tailed) value> α, namely 0.200 and 0.051> 0.05 so that the data was normally distributed. Because the data is normally distributed, data analysis using parametric statistics can be continued.

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Learning attitude	,104	50	,200*	,958	50	,076
Learning outcomes	,124	50	,051	,972	50	,269

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Table 1. Normality Test Table
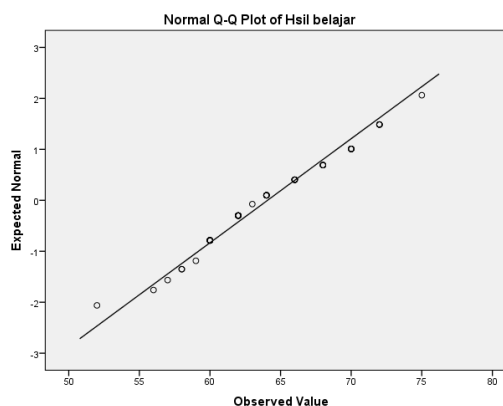
Figure 1. Normal Plot Graph

From the results of the normality test, it shows that the dots spread around the diagonal line and follow the direction of the diagonal line, so it can be concluded

that the data in this study is normally distributed.

In research (Sitepu, 2018) states that, in this normality test, it explains that the residuals must be normally distributed, where if the residuals spread in the diagonal line area and are in line with the diagonal line, it is declared normally distributed, but if the residuals spread away from the diagonal line and are not in line with the diagonal line, it is declared not normally distributed.

Linearity Test

Table 2. Linearity Test Table

			Sum of Squares	df	Mean Square	F	Sig.
Learning outcome * Learning attitude	Between Groups	(Combined)	692,680	21	32,985	1,912	,055
		Linearity	314,963	1	314,963	18,259	,000
		Deviation from Linearity	377,717	20	18,886	1,095	,405
	Within Groups		483,000	28	17,250		
	Total		1175,680	49			

Iman Ghozali (2011) in (Nabila, 2019), defines "The linearity test is used to determine whether the relationship between the independent variable and the dependent variable has a significant linear relationship or not". The linearity test is used to prove whether the independent variable has a linear relationship with the dependent variable using a 5% significance level. The results of the linearity test calculation carried out with SPSS 21 for the relationship between perception and student learning outcomes obtained a significance value = 0.405> 0.05, which means that there is a significant linear relationship. This is confirmed in research (Nabila, 2019), to find out the linearity of the data can be used using the Test of Linearity Test with a Significance Level of 5%, so that if the Linearity Significance Value is greater than 0.05 then the data is linear, if it is below 0.05 then the data is not linear.

Correlation Test

The correlation coefficient is a measure used to determine the degree of relationship between variables (Siregar, 2013). Before conducting a correlation test, the requirements of the analysis must be met first, namely the normality and linearity tests, assuming that normal means that the data connected is normally distributed, so a normality test is needed and linear means that the data connected is in the form of a linear line, so a linearity test is needed (Atmianto, 2016).

The correlation coefficient value is between -1 <0.1, namely if r = 1 perfect negative correlation, meaning that the significant level of the influence of variable X on variable Y is very weak and if r = 1 then the correlation is perfectly positive, meaning that the significance level of the influence of variable X on variable Y is very strong (Sudjana, 2005).

Table 3. Correlation Test Table

		Learning attitude	Learning outcomes
Learning attitude	Pearson Correlation	1	,518**
	Sig. (2-tailed)		,000
	N	50	50
Learning outcomes	Pearson Correlation	,518**	1
	Sig. (2-tailed)	,000	
	N	50	50

The test results obtained a Pearson correlation value of 0.518, meaning that there is a correlation but weak between attitude and learning outcomes with a Sig value. (2-tailed) = 0.00 <0.05, so H_0 is rejected, this means that H_1 is accepted, namely there is a significant relationship between attitude and learning outcomes, although there is a linear correlation but the correlation is weak.

According to Riyanto (2007: 93) The correlation analysis requirement test aims to determine whether there is any deviation or disturbance to the variables in the model. So before doing the correlation test, the requirements of the analysis must be met first, namely the normality and linearity tests, assuming that normal means that the data connected has a normal distribution, so a normality test is needed and linear means that the data connected is in the form of a linear line, so a linearity test is needed.

From the research results obtained, the attitude variable has a significant relationship with learning outcomes. Therefore, it would be better for a teacher to be able to make Physics a favorite subject, so that students have better learning outcomes. So that it will encourage students to be more enthusiastic and motivated in learning.

CONCLUSION

From the research results obtained, the attitude variable has a significant relationship with learning outcomes. **The** test results obtained a Pearson correlation value of 0.518, meaning that there is a correlation but weak between attitude and learning outcomes with a Sig. (2-tailed) = 0.00 <0.05, so H_0 is rejected, this means that H_1 is accepted, namely there is a significant relationship between attitude and learning outcomes, although there is a linear correlation but the correlation is weak.

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