ANALYSIS OF THE RELATIONSHIP IN LEARNING INTEREST TO LEARNING OUTCOMES STATIC FLUID MATERIAL IN SENIOR HIGH SCHOOL

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Abstract :
This study uses a quantitative method using a questionnaire instrument distributed online which aims to analyze the relationship between learning interest and learning outcomes at SMA Negeri 4 Sungai Penuh academic year 2020/2021. The subjects in this study were students of class XI MIPA SMA Negeri 4 Sungai Penuh 72 people. Analysis of quantitative research using the SPSS program to test assumptions (normality and linearity) and making hypotheses through the correlation test obtained a person correlation value of 0.022 <0.05, so it is stated that Ho is rejected or there is a relationship between interest in learning and student learning outcomes physics in SMA Negeri 4 Sungai Penuh.

Keywords: Interest, Learning outcomes, Physics.

INTRODUCTION

According to Law Number 20 of 2003, education is a conscious and planned effort to create a learning atmosphere and learning process so that students actively develop their potential to have religious and spiritual strength, self-control, personality, intelligence, noble character, and the skills needed himself, society, nation, and state. The education unit is an education service group that organizes formal, non-formal, and informal educational pathways at every level and type of education. By realizing the learning process, we must be active in opening a student's way of thinking so that the potential that exists within the student is opened, as well as skills.

Education is a conscious effort to develop the potential of human resources, especially students, by guiding and facilitating their learning activities. One level of education that obtains quality human resources and has high competitiveness is SMA. High school students have a developing mindset and a high spirit of curiosity in studying. Therefore, physics is one subject that can support students' potential and must be taught in high school (Hidayatulah et al., 2015). In the learning process, a teacher should make the learning atmosphere sensitive to high student curiosity by linking problems that occur in nature on this earth. Education is a need that every human being needs to get a better quality of life (Maison, 2019). Education has so far been considered a major element in the development of human resources and is more valuable if it has quality in attitudes, behavior, insights, and abilities.

One of the students' attitudes toward subjects is influenced by the pleasure of learning the lesson (Pritami, 2014). The pleasure of learning about science is one of the keys to the effectiveness of learning & teaching activities. Understanding the concept of science offers satisfaction and personal pleasure for students that arises because after understanding and studying science nature (Ardianto, 2016). Thus, students' positive attitude toward science is influenced by their enjoyment of natural science objects and how the concept of a student is desired in learning.

There are two kinds of students' attitudes toward physics: positive and negative. A positive attitude here means that you are happy and like studying physics, so you can improve your achievements in physics. Students with a positive attitude towards physics can improve their performance in physics and additional mathematics. A lack of or unfavorable attitude towards physics is

a negative attitude. Attitudes are also obtained through receiving, implementing, appreciating, living, and practicing activities. Thus the process of learning as a whole gives birth to personal qualities with good attitudes. With this phenomenon, we must be demanded that students like the lesson first to have a positive attitude toward physics. If students have a negative attitude towards physics, then even after the lesson is over, students will not like the lesson.

Students' attitude towards physics is not very good at school and is considered difficult. As stated by Nordin & Ling (2011), science subjects are often considered difficult, complex, complicated, and not easily understood by students, including physics subjects. This is because students consider that learning physics is only for students who have abilities in the field of physics who can quickly understand physics, and also physics is only seen as learning with several formulas that are very many; it is not imaginable that students get bored in learning takes place, have to memorize each formula given by the teacher.

Physics is a subject considered difficult and avoided by some students because it requires perseverance, seriousness, and a lot of practice. What's more, physics is closely related to mathematics. Solving physics problems mostly uses computational analysis. Meanwhile, not all students have sufficient abilities in mathematics or calculations (Sultan & Bancong, 2017). Often students, if the lesson is considered to be difficult, students prefer to leave class. In this problem, we have to look more closely at conditions and situations. students in learning first so that we are not wrong in doing the lesson later.

Physics is seen as a process and a product, so the learning strategies or methods must be effective and efficient (Maison, 2012). Teachers are required as facilitators who must develop their own concepts to create strategies and methods effectively and efficiently. Physics explains various phenomena in the universe (Astalini, 2019). Physics learning is often associated with the universe with examples in everyday life so that we forget that what we are doing is a phenomenon that occurs in nature. universe.

Iskandar (2013) explains that assessment is the process of gathering and processing information to measure student achievement. Student learning outcomes are essentially changes in behavior resulting from learning in a broader sense covering the cognitive, affective, and psychomotor fields. According to Hardianti (2018), Cognitive is a mental process or thought activity. Meanwhile, according to Ali and Khaeruddin (2012), the cognitive domain is about students' intellectual abilities, as shown in solving physics problems. Psychomotor assessment is an assessment to measure the competence of students towards basic competencies in KI-4. (Ministry of Education and Culture, 2015). According to Octavia (2017), the psychomotor domain is related to skills or the ability to act after a person receives a certain learning experience. According to Mukrohmi (2013), the affective domain is related to attitudes and values. Meanwhile, according to Atina (2016), Affective abilities are part of learning outcomes that have a very important role. Attitude competence is the expression of values or outlook on life owned by a person and manifested in behavior (Ministry of Education and Culture, 2017).

The assessment system and teaching and learning activities are interrelated activities. This aligns with Purwanto (2002), who argues, "Without an assessment, there will be no feedback. Without feedback, good knowledge of the results will not be obtained. Without knowledge of the results, there can be no systematic improvement in learning. So that the formulation of the problem in this study is; (1) What is the relationship between student interest in physics student learning outcomes to know student interest in physics student learning outcomes? (2) What is the description of physics student interest? (3) What is the description of student interest??

RESEARCH METHOD

The method that we use is the quantitative method used to obtain data. The subjects in this study were students in class XI MIPA at SMA Negeri 4 Sungai Penuh for the 2020/2021 academic year. An overview of students' cognitive abilities was obtained from scores of psychomotor abilities in answering multiple-choice tests on static fluid material with indicators of applying and analyzing according to Basic Competency on the material. Students' psychomotor abilities were obtained from scores of psychomotor cognitive abilities in doing static fluid exercises and answered by students The score was obtained from observations made by observation using the google form and the indicators

used in the instrument were preparing, assembling, and processing data and concluding. An overview of the affective domain of students was obtained from affective ability scores in answering self-assessment instruments with spiritual aspects and social aspects.

The data collection technique for cognitive abilities uses a test instrument in the form of multiple choices. Each question answered correctly is given a score of 1 while questions answered incorrectly are given a score of 0.

For the affective domain, the instrument used is self-assessment using a Likert scale. The number of statement items is 25. Each statement item will have a point range of 1-4 with successive criteria "strongly disagree", "disagree", "agree" and "strongly agree".

RESULTS AND DISCUSSION

This research was conducted at SMAN 4 Sungai penuh, with a population of all class XI students at SMA Negeri 4 Sungaipuh with a sample of 60 students. From the research data that was conducted from 72 samples after being tabulated, the results were 55 people who had a good character in the attitude questionnaire. Students and 5 people have very good student attitude characteristics. When presented in percentage form, then those with good character are 76.4% and 6.9% have good student attitude characters. Meanwhile, based on the attitude scale the data obtained the highest score is 95 which is in the very good category, the lowest score is 61 which is in the good category, the mean or average value is 72.34 which is in the good category, this means that the average student chooses a good attitude. The median value or score in the middle is 72, which means it is in a good category. The results of the descriptive statistics questionnaire on students' attitudes toward physics learning can be seen in Table 1.

Table 1. Descriptive Statistical Results Data Questionnaire Students' Attitudes Towards Learning Physics

Interval	Sikap	Mean	Median	Min	Max	%	Frequency
25.0 – 43.75	Tidak Baik					13.9	10
43.76 – 62.5	Kurang Baik	72.34	72	61.00	95	2.8	2
62.51 – 81.25	Baik					76.4	55
81.26 – 100.0	Sangat Baik					6.9	5

Assumption Test

According to Ghazali (2013), the purpose of the normality test is to find out whether each variable is normally distributed or not. Table 2 shows the normality test results data for class XI student learning outcomes and class questionnaire data XI SMA N 4 Sungai penuh using SPSS software. Based on the Kolmogrov-Smirnov table it can be seen that the significance value of Asm. Sig (2-tailed) is 0.74, for the sig value of the questionnaire and the sig value of learning outcomes is 0.92. By comparing the value (sig) with the significance level (α) from the test statistics table, the sig value for the questionnaire is 0.74 and the sig value for learning outcomes is 0.92, based on the data, the sig value is 0.74> 0.05, and the sig value is 0.92 > 0.05. Because the sig value is > 0.05, the data can be said to be normally distributed.

Table 2. Normality Test Results

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
Interest	,109	60	,074	,964	60	,078
Learning Outcome	,106	60	,092	,972	60	,192

Based on the data from the linear test results for class XI SMA Negeri 4 Sungai Penuh using SPSS software which can be seen in Table 3, it is known that the significance value of the data is 0.556. This value indicates that the sig value > α = 0.566> 0.05, so it can be concluded that the data is linear.

Table 3. Linearity Test Results

			Sum of Squares	df	Mean Square	F	Sig.
Learning Outcome*Interest	Between Groups	(Combined)	13178,978	22	599,044	,925	,566
		Linearity	1653,584	1	1653,584	2,554	,116
		Deviation from Linearity	11525,394	21	548,828	,848	,652
	Within Groups		31729,467	49	647,540		
	Total		44908,444	71			

Hypothesis testing

Ahman and Indriani (2007) state that correlation is one of the methods used in statistics to find a relationship between 2 quantitative variables. So the correlation is used to determine how strong the relationship is between the independent variable and the dependent variable. In this study, a significance level of 5% was used. Based on the data from the correlations test or relationship test using the SPSS software from the Pearson correlation table, it can be seen that the significance value is 0.022. This value indicates that the sig value $< \alpha = 0.022 < 0.05$, then Ho is rejected or it can be said that there is a relationship between the characters of Interest students on the physics learning outcomes of class XI SMA Negeri 4 Sungai Lilin. It can also be concluded that from the results of the study, it was found that 76.4%, or 55 students in class XI SMA Negeri 4 Sungai Lilin had a good attitude towards physics learning, and 6.9% or 5 students had very good attitudes towards physics learning. In addition, the researchers also measured students' abilities in a static fluid material.

Table 4. Correlation Test Results

		Learning Outcome	Interest
Learning Outcome	Pearson Correlation	1	-,270[*]
	Sig. (2-tailed)		,022
	N	72	72
Interest	Pearson Correlation	-,270[*]	1
	Sig. (2-tailed)	,022	
	N	72	72

After obtaining the questionnaire scores and student learning outcomes scores, both results were analyzed using Pearson correlation analysis. To answer the research hypothesis, namely whether there is a significant relationship between the character of physics learning attitudes and the results on student physics learning in a static fluid material. Based on the results of the research sta analysis the significance value between students' attitude characters toward student learning outcomes is 0.022 <0.05, then Ho is rejected or it can be said that there is a relationship between students' attitude characters towards student learning outcomes in physics material.

CONCLUSION

Based on the results of the research that has been done, it can be concluded that testing the hypothesis using correlation, namely looking at the significance value, namely seeing whether there is a relationship between the dependent variable and the independent variable. or there is a relationship between student interest in student learning outcomes at SMA Negeri 4 Sungai penuh. Student learning outcomes at SMA Negeri 4 are classified as good with a score of 95, the lowest being 61 and the average student learning interest does not like physics lessons, physics teachers, and models of how they learn.

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