



Description of Student Attitudes: Enjoyment in Learning Physics and Interest in More Time Studying Physics

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ABSTRACT

Purpose of the study: The purpose of this study is to describe students' attitudes toward learning Physics by looking at the level of enjoyment of students in learning Physics and their interest in increasing the time spent studying Physics at SMAN 08 Batanghari. The students' attitudes were analyzed from the indicators of students' attitudes towards Physics, namely the students' pleasure in learning Physics and their interest in increasing their time to study Physics.

Methodology: The research sample data consisted of all classes X, XI and XII IPA. The sampling technique of this study is the total sampling technique. The sample used was 150 students. This type of research is Quantitative with a survey method. The instrument used is an attitude questionnaire. Data analysis in this study used descriptive statistics.

Main Findings: The research results obtained showed that the indicator of enjoyment in learning Physics had the highest percentage of 47.3%, 71 students in the good category, and the indicator of interest in increasing the time to study Physics had the highest percentage, 62.0%, 93 students in the moderately good category. This shows that students' enjoyment in learning can be seen from the amount of time students spend studying Physics.

Novelty/Originality of this study: The novelty of this study is to identify students' attitudes through indicators of students' enjoyment of the Physics subject at SMA Negeri 08 Batanghari which aims to increase students' curiosity and a sense of enthusiasm in understanding physics concepts. As well as increasing indicators of interest in physics subjects by increasing the time to study physics which aims to improve student achievement and learning outcomes.

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1. INTRODUCTION

Education is defined as a conscious and planned effort to create a learning atmosphere and learning process so that students actively develop their potential to have religious spiritual strength, self-control, personality, intelligence, noble character, and the skills needed by themselves, the nation community and the State [1]. Education is a process that "matures" humans. Through the world of education, it is hoped that students will be able to become individuals who can solve various forms of life's problems. Education is an effort to provide certain knowledge, insight, skills and expertise to humans to develop talents and personality [2]. Education is an activity to achieve a predetermined goal [3].

Education has an important role in a nation. Education is dynamic, meaning that it is always changing, of course, following the progress of the times and still sorting out things that are not right. The aim of forming an education program is hoped that Indonesia can create a golden generation by improving the quality of education. Education in Indonesia has been well integrated and requires further development [4]. By considering the essence and role of education, the government is always trying to make policy improvements to improve the quality of education and obtain optimal results. The quality of human resources is largely determined by the quality of education [5]. Therefore, education is a very important factor in the development of the nation and state [6].

Physics is a field of science that studies natural events and phenomena and the interactions between objects in nature. In physics learning subjects, besides carrying out cognitive and psychomotor assessments, the teacher also conducts attitude assessments [7]. If students understand physics, they will be able to improve students' ability to solve problems. Therefore it is very important the implementation of physics in everyday life which of course must be in line with students' physics learning outcomes [8]. Natural sciences are part of science. One branch of natural science is physics. Physics is a science that is born and develops through the steps of observation, formulation of problems, preparation of hypotheses, testing of hypotheses through experiments, drawing conclusions and formulating theories from concepts [9]. In essence science is built on the basis of scientific products, scientific processes and student attitudes [10]. Physics has an important role in explaining various phenomena that occur in the universe and has made many contributions to the development of science and technology [11]. Physics is also one of the subjects that can support students' potential and must be taught in high school [12].

Attitude is defined as the most important part of everyday life. Attitude is a feeling or behavior that is accompanied by a tendency to take action on an object. Attitudes can be obtained through activities, such as: listening, receiving, interpreting, implementing, experiencing, communicating and appreciating [13]. Thus the learning process as a whole can give birth to personal qualities with a good attitude. If the lack of student interest in learning physics causes students to be lazy to do assignments, dislike physics reading books or things related to physics, and feel very happy when the physics teacher is not present. Problems like this will disrupt the student learning process and make learning objectives not optimally achieved. As a result, the quality of education has decreased due to low student learning outcomes. For this reason, it is necessary to carry out an assessment of aspects of student attitudes [14]. So, attitude in physics is very important so that it can help solve problems faced by students [15].

Ideal learning is seen from the obligations and efforts of teachers and students in managing a good and interesting class. Learning can be said to be ideal if learning is able to attract students' interest in learning, creates student activity when learning takes place and is able to motivate students to focus on learning to interpret learning material the. As agents of change, educators are expected to be able to instill the characteristics, traits and character as well as an independent spirit, responsibility and prowess in life to students [16]. Each student has different abilities [17]. The success of the learning process is a goal to be achieved in implementing education in schools [18].

There are several things that affect the learning process of students, namely motivation, level of student readiness, interaction between students and teachers, verbal abilities and teacher skills in communicating to students are important indicators for teachers to implement the learning process optimally. Where in the learning process in humans can be formulated as a mental or psychological activity that takes place in active interaction with the environment, which results in changes in knowledge and attitude values [19]. The characteristics of students who are highly motivated to learn will be responsible, work hard, be optimistic, have high spirits, always think about the future, enjoy the task regardless of the level, and respond quickly to something about their achievements and in solving problems. Therefore, by knowing these characteristics the teacher can appropriately use the right strategy to foster motivation in their students

Enjoyment in learning physics is a student's love for studying physics which is supported by high curiosity. The positive attitude given by students is influenced by teaching methods and a comfortable classroom atmosphere. This will lead to students' interest in increasing their time to study physics which is interpreted as an expression of students' favorite in studying physics so that they use their free time to study physics more deeply. Thus, if students enjoy studying physics, students will spend more time studying physics regularly. So that makes it focused and enthusiastic in understanding the concept. So as to improve achievement and student learning outcomes.

To measure the level of students' enjoyment in learning Physics and their interest in increasing their time to study Physics, the authors conducted a study on students of SMA Negeri 08 Baatanghari. This research was conducted by giving a questionnaire consisting of 2 indicators, namely students' enjoyment in learning Physics as many as 10 statements and interest in increasing their time to study Physics as many as 8 statements. The research was conducted by collecting data on all classes X, XI and XII IPA. This study aims to determine the most dominant attitude category among indicators of students' enjoyment in learning Physics and their interest in increasing their time to study Physics.

2. RESEARCH METHOD

This research was conducted at SMA Negeri 08 Batanghari which is located on Jalan Jambi - Ma. Bulian KM 37, Golden Bridge, Kec. Pemyung, Kab. Batanghari, Province. Jambi. This study uses a research design with a quantitative approach and survey methods. Research through a quantitative approach is a type of research to examine objects from samples that are arranged systematically, planned and structured in the form of numbers. The quantitative research approach emphasizes objective phenomena and is studied quantitatively. The investigation of the object under study uses a quantitative research design in the form of numbers, which is carried out statistically, structured and controlled trials [20]. Surveys are used to gather information in the form of opinions from a large number of people on a particular topic. The main purpose of the survey method is to find out the general characteristics of the population [21].

The sampling technique of this study is the total sampling technique. The sampling technique uses total sampling, namely the number of samples is the same as the population [22]. So that the total sample of this study was 150 students at SMA Negeri 08 Batanghari. The study used a test assessment instrument in the form of a questionnaire. The type of test instrument chosen was a questionnaire using indicators of enjoyment in learning Physics and an interest in increasing the time spent studying Physics. This research questionnaire was adopted from thesis [23] with 54 statements with 7 indicators that have passed the validation test and have a Cronbach alpha reliability value of 0.9. However, in this study only 10 statements were taken from the indicators of enjoyment in learning Physics and 8 statements from the indicators of interest in increasing the time to study Physics. This is done to find out the most dominant attitude category between indicators of students' enjoyment in learning Physics and their interest in increasing their time to study Physics.

The data analysis technique in this study is descriptive statistics. Descriptive statistics are types of statistics that describe and analyze research results or observations, but do not draw conclusions. Descriptive statistics only describe the description of data that actually exists by distributing the data but not evaluating the data. As for what is included in descriptive statistics are tables, charts, graphs, averages, modes, medians, variances, standard deviations and other measures [24]. So that by conducting this research, it is hoped that it will be able to broaden the personal knowledge of researchers and other researchers in conducting research, as well as helping all parties involved as components of the world of education to improve the learning process.

3. RESULTS AND DISCUSSION

The novelty of this research is to explore students' knowledge of attitudes through indicators of enjoyment in learning Physics and an interest in increasing the time spent studying Physics at SMAN 8 Batanghari. The essence of evaluating student attitudes is to find out student progress in their learning process in difficult subjects such as Physics. Student learning attitudes are in the form of feelings of pleasure or displeasure and likes or dislikes of those things [25]. Such an attitude will play a role in the process and learning outcomes achieved. Because the success of education can be seen from the development of students both from student achievement and changes in student behavior or attitudes in each lesson. The description of students' attitudes at SMAN 8 Batanghari based on indicators of enjoyment in learning Physics can be seen in table 1.

Table 1. Classification of Enjoyment Indicators in Learning Physics

Interval	Frequency	(%)	Category		
10.0 – 18.0	1	0.7	Very not Good	Mean	33.7
18.1 – 26.0	15	10.0	Not Good	Median	34.0
26.1 – 34.0	71	47.3	Enough	Std. Deviasi	5.64
34.1 – 42.0	52	34.7	Good	Minimum	16.0
42.1 – 50.0	11	7.3	VeryGood	Maximum	49.0

Based on table 1. Classification of indicators of pleasure in learning Physics, it was found that 1 out of 150 students in the very poor category was in the good category with a percentage of 0.7%, 15 out of 150 students in the bad category were in the bad category with a 10.0% percentage, students who categorized as quite good as many as 71 of 150 students with a percentage of 47.3%, students who are in good category as many as 52 of 150 students with a percentage of 34.7% and students who are categorized as very good as many as 11 of 150 students with a percentage of 7.3%. The results of the analysis of the data obtained are the mean value of 33.7, the median value of 34.0, the standard deviation value of 5.64, the minimum value of 16.0 and the maximum value of 49.0.

Based on table 1. it shows the results of the questionnaire analysis of indicators of pleasure in learning Physics, the dominant one is in the good category, which means that students enjoy studying physics. Meanwhile, based on table 2, the results of the questionnaire analysis show that the indicator of interest in increasing physics study time is dominant in the good category, which means that when students enjoy studying physics, students will increase their time studying physics and understand physics concepts more deeply. In

order to be able to utilize technology effectively to respond to the rapid flow of economic change and current technological developments, mastery of scientific concepts, including physics concepts is required [26].

So that the positive attitude of students towards Physics subjects will be integrated with an interest in increasing the time to study Physics. Students' enjoyment in learning can be seen when students ask their teachers about the assignments given by the Physics teacher. So that the attitude of pleasure in learning physics is very good for students to apply, because it can minimize student errors in physics material. Meanwhile, the attitude of interest in increasing study time can be seen when students feel less with study hours at school. So there is a desire to increase the time to study physics at home or at tutoring places.

Table 2. Classification of Indicators of Interest in Increasing Physics Study Time

Interval	Frequency	(%)	Category		
8.0 – 14.4	1	0.7	Very not Good	Mean	26.16
14.5 – 20.8	9	6.0	Not Good	Median	26.0
20.9 – 27.2	93	62.0	Enough	Std. Deviasi	4.15
27.3 – 33.6	39	26.0	Good	Minimum	14.0
33.7 – 40.0	8	5.3	VeryGood	Maximum	38.0

Based on table 2. Classification of indicators of interest in increasing physics study time, it was found that 1 out of 150 students who were in the very poor category with a percentage of 0.7%, students who were in the bad category were 9 out of 150 students with a percentage of 6.0%, students 93 students out of 150 students categorized as good enough with a percentage of 62.0%, students in good category were 39 out of 150 students with a percentage of 26.0% and students in very good category were 8 out of 150 students with a percentage of 5.3%. The results of the analysis of the data obtained are the mean value of 26.16, the median value of 26.0, the standard deviation value of 4.15, the minimum value of 14.0 and the maximum value of 38.0.

In the process of learning physics, students are required to be able to solve the problems given. The questions given are intended to train students to think scientifically about existing problems [27]. Students who score with good criteria stated that they wanted to take part in physics learning activities, but not in school activities related to physics challenges. Students who scored poorly on the criteria revealed that they were not interested in increasing their physics study time by attending physics tutoring or extracurricular activities, and did not like reading physics books during holidays. Students who like certain fields will tend to be consistent about learning material, such as doing homework given by the teacher and taking more time to study the material with various activities.

Students who want good learning outcomes certainly have to add time to study Physics at home. Learners can complete their learning objectives optimally if they increase their study time outside the classroom [28]. Individual study at home is one of the optimal learning processes if done properly and seriously. Students' awareness to improve physics learning outcomes is shown by students by taking the time to find sources regarding physics lessons to fulfill their knowledge independently. Students' attitudes towards subjects are factors that influence student learning outcomes. Thus, ongoing learning should be able to foster students' positive attitudes towards subjects, so that optimal results will be obtained [29]. Improving student achievement can not be separated from the quality of learning activities in class. Not only that, teacher quality is also important in increasing achievement and fostering a positive attitude in certain learning, especially in Physics [30].

The learning process can be said to be optimally successful if students interact with all their senses. In addition, the teacher as a facilitator and educator can display stimuli that will be processed by various senses. There are several factors that can support the learning process by varying the use of media and learning models. So that students feel interested in learning. If a teacher wants his students to be able to master certain information and skills, and tries to make the most of his time, then the direct learning model is very appropriate to use. Because this learning model makes a teacher an information center so that teachers can make the best use of the opportunities that exist. Besides that, the aspect of scientific attitude in learning physics is very important to develop because attitude is the basis for students to be able to respect the work of others and respect themselves [31].

4. CONCLUSION

Attitude is a picture of a person's behavior. In the realm of education, behavior or attitudes are studied in educational psychology. Because it is important to know the attitude of students when learning. In the results obtained in this study, it is known that students' attitudes in Physics subject from the two indicators of students' attitudes towards learning Physics are in the fairly good category with percentages of 47.3% and 62.0%. This shows that students' enjoyment in learning Physics can be seen from the amount of time students spend studying Physics. Thus it shows that the attitude of students in Physics subject at SMAN 8 Batanghari is still in the

sufficient category. So it is necessary for teachers to change strategies in teaching so that students behave well and are actively involved in the learning process.

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