

**STUDENT ATTITUDES TOWARDS NATURAL SCIENCE: REVIEW  
OF PLEASURES AND CAREER INTERESTS  
AT JUNIOR HIGH SCHOOL 17 JAMBI CITY**

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**Abstract**

The research conducted aims to identify students' attitudes toward science subjects through two indicators, namely the pleasure of learning science and career interests in the field of science owned by students at Junior High School 17 Jambi City. The research instrument used was a questionnaire. The subjects of this research were 128 students at Junior High School 17 Jambi city with a total of 128 students. Samples were taken using a total sampling technique. Data were analyzed using descriptive statistics. The results showed that 72 people out of 128 respondents had sufficient attitudes in the pleasure of learning science and also had enough interest in a career in the field of science. The results of this study also showed that when a child likes to study science, the child also has a good interest in a career in the natural sciences.

Keywords: attitude, career, pleasure

**Introduction**

Education is the most important thing in advancing the life of a nation. Because with education, a person will be able to place himself in a very decent way in the family environment even in the community (Astalini, & Kurniawan, 2018). According to Budi (2010), education is an effort to improve the capabilities of human resources. The education system in Indonesia starts from primary education, namely elementary school, junior high school and senior high school.

According to Mawaddah and Maryanti (2016), Junior High School is the first level of basic education which is useful for laying the foundations of intelligence, personality, and knowledge for students to continue to the next level. At the junior high school level, there are natural science subjects, or what we are familiar with as science subjects. Science is a branch of science that studies about phenomena that occur in nature (Purbosari, 2016). Natural science is the body of knowledge that results from one's curiosity. As the body of knowledge, science is formed from facts, concepts, principles, hypotheses, theories, and models. Science is implemented in education through a learning process that has become a

compulsory subject from elementary to the high school level. The success of the learning process is influenced by the quality and way of teaching a teacher (Darmaji, 2018). Two factors can affect the learning process, namely internal factors, and external factors. Internal factors can be in the form of interests, learning motivation, attitudes, study habits, and self-concepts, while external factors can be in the form of the school environment, peers, class atmosphere, school curriculum, facilities, and infrastructure (Astalini, Kurniawan, Perdana & Kurniasari, 2018).

Internal factors such as attitude greatly affect the learning process. Attitude is a central part of human identity (Rahman, 2019). Rosa (2012) states that attitude is a person's tendency to react to an object or situation that is encountered in a certain way so that the attitude can be positive or negative. A positive attitude is a tendency for someone's actions that lead to approaching, liking, and expecting certain objects. Attitude not only includes feelings of dislike, but also positive attitudes that include our attachments and loyalty to people, things and ideas (Jufrida, et al., 2019). While negative attitudes are the tendencies of one's actions that lead to laziness, carelessness, wasteful, undisciplined and so on certain objects. Darmawangsa (2018) states that the attitude in learning is very important, as is the attitude in learning towards natural science subjects. One of the functions and objectives of science subjects is that students can gain experience in applying scientific methods through experiments and experiments so that they are trained to be scientific. Because to measure students' attitudes towards science lessons an indicator is needed. These indicators are:

- 1) Pleasure in learning science
- 2) Career interests in the field of Natural Sciences

The pleasure of learning science according to it is defined that every student who has a positive attitude towards science subjects must have a sense of comfort and pleasure when dealing with science subjects (Kurniawan, et al., 2018). Fun during the learning process can be shown through positive responses given by students in natural science subjects. The attitude of liking each student also shows students' enjoyment of Science, while the attitude of dislike will indicate that students have a feeling of displeasure towards Science. Students' happy attitude towards Natural Sciences can be shown how students are open and enthusiastic about Natural Science subjects inside or outside the classroom. According to Hamdu and Agustina (2011) when students have the will and desire to learn, then it can increase the achievement of these students. Not only have achievements in the field of science, students who have a positive attitude towards science subjects will certainly also have the desire to have a career in the field of science.

Interest in a career in the field of Natural Sciences according to (Kurniawan et al., 2018) is the attitude of students who are interested in a career or continuing their education in the Natural Sciences field. Interest in a career in the field of science indicates that students have plans for a career in the field of science. According to Winkel and Hastuti (2006), career planning is an important aspect and should be owned by students to determine further studies that are appropriate to their interests and interests. Careful career planning while at school can help someone to get to know their interests and talents (Atmaja, 2014). Apart from that

career planning should begin with the understanding of students to explore careers. Career exploration is an attempt by a person in finding information about the career choices that he will develop. Career exploration is so important to be instilled since early adolescence or junior high school so students have lots of information and the right choices and have plenty of time to think about their future in putting their talents and interests to the next level.

A positive view of learning science will generate interest in a career in the field of science. The things that affect the interests and interests of this career according to Komara (2016) are interests, talents, learning achievements and self-confidence. When students have an interest in science subjects, they should also have a sense of interest in a career in the field of science. Agree with Komara (2016) Parson and Williamson (in Suherman, 2007) also said that the factors that influence the interests and interests for a career are the ability, achievement, and interests of students.

The purpose of this study is to describe the attitudes of students towards science subjects which are reviewed through indicators of the pleasure of learning science and career interests in the field of science in students of Junior High School 17 Jambi City.

### Method

This research was conducted at Junior High School 17 Jambi City in August 2019. The purpose of this study was to describe the attitudes of students 'pleasure in learning science and students' interest in pursuing a career in the natural sciences. The research design used is quantitative with the type of survey. In KBBi the survey is defined as one of the research techniques that clearly limits the data being reviewed and investigated.

The subjects of the study were students in Junior High School 17 Jambi city class of 2019/2020 with a total of 128 students. Samples were taken using a total sampling technique.

The questionnaire instrument that researchers used in this study were adopted from Astalini and Kurniawan (2019). The type of questionnaire that researchers used was a closed questionnaire using a Likert scale. According to (Maison, Astalini, Kurniawan, & Sholihah, 2018) when using the Likert scale each statement item will be divided into 5 scales with weights for positive statements 5,4,3,2 and 1. Whereas for negative statement weights are 1, 2,3,4 and 5. The indicators and ranges used in the questionnaire attitudes toward science subjects are shown in the table below:

**Table 1.** Categories and Indicators for Questionnaire Attitudes Towards Natural Sciences

Category	Range	No Item	
		Pleasure of learning science	Career interests in the field of science
Very Not Good	9.0-16.2		
Not Good	16.3-23.4		
Enough	23.5-30.6	4,11,17,24,29,36,42,49,56	6,13,19,26,31,38,44,51,52
Good	30.7-37.8		
Very Good	37.9-45.0		

In conducting this research, the first step taken by the researcher was to spread the questionnaire. After distributing the questionnaire, data will be obtained. And the data were analyzed using SPSS with descriptive statistical analysis. According to (Rosana & Setyawarno, 2016). In general descriptive statistics are used to describe the characteristics of data in the form of averages and variations of data.

**Result and Discussion**

The renewal of this study is an indicator of the attitude towards science subjects that is used is the pleasure in learning science and career interests in the field of science that will be identified in students of Junior High School 17 Jambi City. This indicator was obtained from Fraser's research (1981) which was implemented in Indonesia by Astalini and Kurniawan (2019).

***Pleasure of Learning Science***

According to Davoudi, et al (2016) Fun in learning is an emotional variable and an important concept in the learning process because it delights in describing educational problems to students. The pleasure of learning science can be interpreted as how willing students learn science and see the responses of students to learning science.

The results of the statistical analysis of the data obtained by researchers in students of Junior High School 17 Kota Jambi regarding the indicators of natural science learning pleasure can be seen in the following table:

**Table 2.** Description of pleasure in science learning

<b>Interval</b>	<b>Category</b>	<b>Frequency</b>	<b>(%)</b>
9.0-16.2	Very Not Good	0	0
16.3-23.4	Not Good	10	7.8
23.5-30.6	Enough	72	56.3
30.7-37.8	Good	42	32.8
37.9-45.0	Very Good	4	3.1
	<b>Jumlah</b>	128	100

Table 2 describes that the response of students in the very bad category was 0% (0 out of 128 students), then the category was not good 7.8% (10 out of 128 students), then the category was quite 56.3% (72 out of 128 students), then the good category was 32.8 % (42 out of 128 students), and very good category 3.1% (4 out of 128 students). Thus, based on the results of the data analysis that students of Junior Hugh School 17 Kota Jambi in the indicators of pleasure in learning science are dominantly categorized quite well.

The most important interaction during the learning process is the psychological relationship between the teacher and students in fostering attention and desire so that students are willing and happy to learn. Enjoyable learning cannot be separated from the dialogical interaction of the teacher and students which is the starting point for the formation of effective learning conditions (Sulthon, 2016). The pleasure in learning science is the love of students to learn

science that is upheld by high curiosity (Astalini, Kurniawan & Sumaryanti, 2018). Teachers can create a sense of fun in science lessons by involving students directly in many ways, inviting work and showing off the work of students, taking time to rest and play, making the classroom comfortable, choosing interesting methods and media materials, transparency of assessment and creating several activities together (Syahid, 2019). The affective dimension involves feelings related to science, divided into sub-components, both positive and negative. The pleasure of science learning compilation is done through a sense of pleasure in science subjects while displeasure is conveyed through fear and anxiety during the learning process (Ward, Donnan, & McNabb, 2016).

In general, students who have fun in learning science will judge or view science learning positively. By looking at science positively, of course, it is able to arouse the interest of students to continue to study science and will have a sense of interest in a career in the field of science. Students who are said to have the pleasure of learning science can be viewed from several aspects such as he thinks that science is a very pleasant lesson, he is very enthusiastic when learning about science begins, and he also thinks that science is an important lesson.

#### ***Career interests in the natural sciences***

The students' view of science does not only affect the pleasure of learning science but also affects a sense of career interest in the field of science. To see the identification of students' career interests in the field of Natural Sciences, you can say look at the following table:

**Table 3.** Description of career interest in science

<b>Interval</b>	<b>Category</b>	<b>Frequency</b>	<b>(%)</b>
9.0-16.2	Very Not Good	0	0
16.3-23.4	Not Good	24	18.8
23.5-30.6	Enough	76	59.4
30.7-37.8	Good	24	18.8
37.9-45.0	Very Good	4	3.1
	<b>Jumlah</b>	128	100

Table 3 describes that student responses in the very bad category were 0% (0 out of 128 students), then the category was not good 18.8% (24 out of 128 students), then the category was quite 59.4% (76 out of 128 students), then the good category 18.8 % (24 out of 128 students), and very good category 3.1% (4 out of 128 students). Thus, based on the results of the data analysis, the students of Junior High School 17 Jambi City in the indicator of pleasure in learning science are dominantly categorized quite well.

From the results of the study, we can identify that most students are interested enough to have a career in the field of Natural Sciences. Interest in a career in the field of science is closely related to the interests and enjoyment of studying science. Students who have fun in learning science, in general, these students will also have an interest in a career in the natural sciences because they tend to feel positive or assess science as it has been described previously.

So from the results of the study, we can say that students' views on science are very diverse. There are students who look at science positively, then these students will also have the pleasure of learning science that is good enough, good even very good and will have an interest in a career in the field of science. Whereas for students who view science negatively, the student will not have the pleasure of learning science even he will not have an interest in a career in science. This result is also in accordance with research (Astalini, Kurniawan, & Putri, 2018) that interest in a career in science in junior high school students is categorized enough with a percentage of 41.8% meaning almost most students want to continue their careers in the field of science.

### Conclusion

Based on the results of the study concluded that the attitudes of students towards science subjects at Junior High School 17 Jambi City were dominant enough in the indicators of pleasure in learning science and indicators of career interest in the field of science. Students who see science positively will have a good level of pleasure in learning science and will have a good interest in a career in the field of science. And vice versa, students who view science negatively, then generally will not have a sense of pleasure in learning science and do not even have a good interest in a career in the field of science.

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