



Differences and Relationship Between Attitudes and Self Efficacy of Female and Male Students in Science Subjects in Junior High School

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Abstract. Students' attitudes and self-efficacy are very important in science subjects. With a good attitude and self-efficacy, learning will be easier and more enjoyable. This study aims to examine the attitudes and self-efficacy of female and male students from two classes, namely VII A and VII B in junior high school. This research is a type of quantitative survey research. The sampling technique used in this study was simple random sampling with the research subjects as many as 74 junior high school students studying science. The instrument used in data collection was 28 questions containing 5 choices that must be filled out by students. Analysis of the data used in this study in the form of descriptive analysis and T test and correlation test to determine whether there is a comparison and relationship between students' attitudes and efficacy towards science. The results obtained indicate that there are significant differences and relationships between attitudes and self-efficacy of female and male students. These results indicate that male students have an average attitude and good self-efficacy compared to female students at the junior high school level.

Keywords: Science, Attitude, Self-efficacy, Gender

Introduction

21st Century Learning is learning that integrates literacy skills, knowledge skills, skills and attitudes, and mastery of technology (Anggraeni et al., 2019; Ramdani et al., 2019; Marshel & Ratnawulan, 2020). 21st Century Learning is known as the knowledge age, in this era, all alternatives to meet the needs of life in various contexts are more knowledge-based (Chai & Kong, 2017; Williams, 2017; Anwar, 2018). In the 21st century, education is becoming increasingly important to ensure students have learning skills. These 21 skills are relevant to the four pillars of education which include learning to know, learning to do, learning to be and learning to live together (Wegawati et al., 2016; Gelen Assoc, 2018; Gürsoy, 2021). Therefore, students must have great motivation to always learn to deepen knowledge that is always evolving from time to time

Education is the learning of knowledge, skills, and habits of a group of people that are passed down from one generation to the next through teaching or research (Ferreira et al., 2018; Marniati, Sanova et al., 2019; Mason, 2020). The purpose of national education is to direct the development of students' potential to become human beings who believe and are devoted to God Almighty, have noble character, are healthy,

knowledgeable, capable, creative, independent, and become democratic citizens and have responsibilities. (Ahmad Agung Yuwono Putro et al., 2017; Kamza et al., 2020; Lestari et al., 2021). One of the sciences that improve human understanding of various aspects of reality in the human world is science. Science in the field of education is scientific knowledge and serves as a very important disciplinary knowledge in the field of education. Science learning aims to help students develop critical and creative thinking skills (Wahyudi et al., 2017; Hong & Talib, 2018; Crawley et al., 2019)

Natural Sciences (IPA) is a science that can be obtained using the steps of scientific activities such as observation, measurement, formulating, testing hypotheses, collecting data, experimenting and predicting deduction to produce an explanation of a phenomenon that can be trusted (Utaminingsih et al., 2018; Tri Pudji Astuti, 2019; Maison et al., 2020). Science at the SMP/MTs level is packaged in an integrated manner in science science which includes: physics, biology, chemistry, and earth and space sciences and science studies include aspects of products, processes, scientific attitudes and educational applications (Imaduddin & Khafidin, 2018; Wulandari et al., 2019; Cooper & Berry, 2020;). At first, it was difficult for students to learn science at the junior high school level because it was different from the lessons in elementary school. Science learning also requires critical thinking skills that need to be developed and familiarized by each individual and learning outcomes are important things that will be used as benchmarks for student success in learning and the extent of the learning system provided (Fauzan et al., 2017; Widayat & Hindarto, 2017 ; Udi Budi Harsiwi, 2020). One of the science subjects in junior high school is physics which studies natural laws and phenomena.

Physics is a science that learns about something concrete and proven mathematically that can interact with human life and with physics all work becomes light because of the application of physics applied in sophisticated technology (Iman & Khaldun, 2017; Nurmayani et al., 2018 ; Harefa, 2019;). Physics is in fact one of the subjects that is considered heavy and is avoided by some students because it requires perseverance, seriousness, and a lot of practice (Ana Dhiqfaini Sultan, 2017; Astalini et al., 2018; Puspitasari et al., 2019). Students' understanding of a concept that starts from the wrong concept will certainly be different from the scientific understanding possessed by experts or scientists in the field of physics (Warfa et al., 2018; Maison et al., 2019; Madu, 2020;). Physics learning which is mostly natural phenomena to understand knowledge contextually. This requires a scientific approach to science to improve and develop the knowledge experienced by students. The increase in students' conceptual knowledge can be seen through students' science process skills and student attitudes.

One of the factors that influence the learning process is attitude. Attitude is a condition of mental emotional readiness to take a certain action when a situation is faced. Attitude assessment is assessed indirectly and continuously on all subjects based on positive and negative attitudes during school inside and outside learning, using observation sheets or journals (Erdogan, 2017; Nufus et al., 2017; Rosdianto, 2017; Putra et al., 2018). Students' attitudes towards science significantly change their achievements in science. Enjoyment of learning in science (IPA) can be defined that every student who has a positive attitude towards science must have comfort and feel the pleasure and values of parents towards science subjects encourage parents to develop children's interest in a career in science (Maharaj-Sharma & Sharma, 2017; Halim et al., 2018; Kurniawan et al., 2018). A positive attitude of students in accepting assignments is a good start for the student's learning process, on the other hand, if students are negative, they will tend to stay away, hate and avoid it. (A. Setiawan, 2017; Ningsi, 2020; Sriyanti, 2021). It can be concluded that students' attitudes can show students' feelings towards the subjects being studied.

Self-efficacy ability is an ability that must be possessed by students in perform tasks, organize their own learning activities, and live up to their own academic expectations and those of others (Zimmerman et al., 1996; Nilson, 2011; Beghetto & Karwowski, 2017).

Self-efficacy abilities also refer to problem solving as one of the learning objectives that must be achieved by students (Fahle et al., 2019; Hesbol, 2019; Henderson et al., 2020;). Self-efficacy refers to considering how much a person believes about his or her ability to carry out a number of learning activities and their ability to complete learning tasks (Shirkey, 2013; Webb, 2015; Utami & Wutsqa, 2017; Thompson et al., 2021). Self-efficacy is also related to gender, both female and male students are expected to provide confidence in their abilities in completing both school assignments and national exams. It can be concluded that self-efficacy can make students develop positive attitudes towards their abilities.

Gender difference is one of the topics that attracts a lot of attention today. Gender is a cultural group of attributes and behaviors that exist in men and women (Kartika & Rabial Canada, 2017; Yunarti, 2018; Wahyuningsih, 2020). School is a place where teachers as facilitators often consciously or unconsciously have given different treatment between male students and female students. In order to fulfill gender equality and justice, education needs to fulfill the basics of education, which is to deliver every individual or people to get education, so that it can be called populist education (Shchurko, 2018; Wahyuningsih, 2020; Wegawati et al., 2016). Gender equality in education has a positive impact on children's welfare and development and contributes to women's work and empowerment, as well as economic growth (Fuller, 2019; Dolch, 2020; Aslam, 2021).

This research is similar to previous research conducted by (Erdogan, 2017; Rosdianto, 2017; Putra et al., 2018) about students' attitudes towards science. However, previous research did not compare students' attitudes and self-efficacy. In addition, previous studies did not perform some of the tests carried out in this study. Previous research also did not examine gender to determine the superiority of attitudes between female and male students. Other previous research conducted by (Kruit et al., 2018; Anna Solé-Lluss et al., 2019; Mutlu, 2020) on students' self-efficacy. However, the previous research did not compare the attitudes and self-efficacy of the students' science process and did not conduct the test as was done by this study and did not test gender and class in one school. So it can be said that previous research did not test some of the tests carried out by this study. Gender differences between men and women significantly affect attitudes and self-efficacy of junior high school students. By looking at the importance of students' attitudes and self-efficacy in science subjects in junior high school, the researchers conclude the formulation of the problem as follows:

1. Are there differences between attitudes towards self-efficacy of female and male students in science subjects?
2. Is there an influence between attitudes towards self-efficacy of female and male students in science subjects?

Methods

This study uses a quantitative method with a comparative type. Quantitative research is a field of inquiry that stands alone, is scientific in nature and aims to understand social reality (Manzilati 2017; Suwendra, 2018; Rukin, 2019). The data obtained using numerical data with a scale of like 5. This study gains an understanding of the phenomenon from a basic logic, usually covering the population of the study population. Quantitative research which is divided into comparative and qualitative research uses survey procedures. Survey research is a quantitative research procedure wherein administering a survey on a sample or on an entire population design to describe attitudes, opinions, behaviors, or specific characteristics of a population (Creswell, 2012).

The instrument in this study used a questionnaire, namely student attitudes and self-efficacy questionnaires. There are 17 statements in the student attitude questionnaire that are valid. And there are 11 statements in the self-efficacy. This instrument uses a Likert scale. A scale consisting of 5 points with a very good score of 5, good that is 4, enough is 3, not good that is 2, and very not good is 1. Each statement is representative of each indicator. The Grid of student attitude self-efficacy questionnaire instruments for science subjects are presented in the following table:

Table 1. Grid of Student Attitude and self-efficacy Questionnaire Instruments in Science Subjects

Variabel	Indicator	No. Statement Items
Attitudes	Adoption of scientific attitude	3, 26, 10, 23, 28, 35, 48
	Fun in learning science	4, 11, 24, 17, 29, 36, 42, 49, 56
Self-Efficacy	Individual expectations of abilities	13, 14, 15, 16, 17, 18
	Take experience not as an obstacle	19, 20, 21, 22, 23

The intervals and categories of students' attitudes and self-efficacy for science subjects are presented in the following table:

Table 2. Categories of Student Attitudes and self-efficacy

Category	Attitudes		Self Efficacy	
	Adoption of scientific attitude	Fun in learning science	Individual expectations of abilities	Take experience not as an obstacle
Very Not Good	8.0 – 14.4	9.0 – 16.2	6.0 – 10.8	5.0-9.0
Not good	14.5 – 20.8	16.3 – 23.4	10.9 – 15.6	9.1-13.0
Enough	20.9 – 27.2	23.5 – 30.6	15.7 – 20.4	13.1-17.0
Good	27.3 – 33.6	30.7 – 37.8	20.5 – 25.2	17.1-21.0
Very good	33.7 – 40.0	37.9 – 45.0	25.3 – 30.0	21.1-25.0

Regarding students' attitudes and self-efficacy, this study was conducted with 2 samples, namely class VII A and VII B samples with each class having 37 students. The sample consisted of two groups, namely the experimental group and the control group (Fromowitz, 2017).

The population of this study was 74 students from SMP 10 Mestong in Muaro Jambi Regency. The sampling technique is total sampling. The subjects taken were class VII A and VII B which consisted of 40 girls and 34 boys. The sample in this study uses the Probability Sampling sampling technique, which is a sampling technique that provides equal opportunities for each member (element) of the population to be selected as a sample member (Achdiyati & Utomo, 2018). The reason for using the purposive sampling technique is because not all samples have criteria that match the phenomenon under study. Therefore, the authors chose a purposive sampling technique which stipulates certain considerations or criteria that must be met by the samples used in this study.

This research was carried out starting from distributing questionnaires or questionnaires, then analyzing quantitative data, then identifying the results for follow-up. At the data collection stage, questionnaires were given to 74 students consisting of 40

female students and 34 male students from grades VII A and VII B at one SMP 10 Mestong school in Muaro Jambi Regency. From the data, data analysis is then carried out, namely data coding, filtering appropriate data and analysis of the data.

Data Analysis Techniques The data analysis technique used is sampling. The sampling technique was adopted because it provides unbiased parameter estimates and is better if the population is homogeneous (Tao & Ning, Bankole & Nasir, 2020; Alsabahi et al., 2021). Using sampling can reduce the potential for bias in the selection of cases to be included in the sample. Due to the homogeneity of the population, the sampling frame is clear and general in nature. This research was carried out starting from distributing observation sheets, then analyzing quantitative data, then identifying the results for follow-up. At the data collection stage, questionnaires were given to 74 students at 7 Mestong Junior High School. From the data, data analysis is then carried out, namely data coding, filtering appropriate data and analysis of the data. In describing the data in the form of attitudes and science process skills of students, the statistics used are descriptive and inferential statistics. The description or presentation of large amounts of data that includes the mean, mode, median, maximum, minimum, and standard deviation is a descriptive statistic. Inferential in the form of independent until t test, and correlation. Then test for normality, homogeneity, and linearity. Then the data were analyzed using SPSS 26 program to obtain the percentage, frequency, average and standard deviation. With this random sampling condition, data deviation is carried out.

In collecting data, the first activity that must be done is to select students based on the categories given by the researcher, then provide a questionnaire on student attitudes in science subjects. Then the questionnaire data was processed using the SPSS application. The use of the SPSS application functions to view descriptive statistics, in the form of mean, min, max, percentage, and category of students. The data needed in research can be collected or obtained from various data sources. The procedure for collecting data in this study is in accordance with the following diagram:



Figure 1. Research procedure

Results and Discussion

Descriptive Analysis of Attitude and Self-efficacy

The following describes the results of descriptive statistics on students' attitudes and self-efficacy variables in science subjects. With a question indicator on attitude: Adoption of scientific attitude, Fun in learning science. Indicators of self-efficacy: Individual expectations of abilities, Take experience not as an obstacle. Where the results obtained from distributing questionnaires to SMP N 10 Mestong, Muaro Jambi Regency to two classes, namely grades VII A and VII B. The description of students' attitudes towards science on the indicator of the adoption of scientific attitudes is shown in the Table 3.

Table 3. Description of Student Attitudes on Indicators of Adoption of Scientific Attitudes

	Category	Interval	Freq		%		Mean		Median		Min		Max	
			F	M	F	M	F	M	F	M	F	M	F	M
VII A	Very not good	8.0 – 14.4	0	0	0	0								
	Not good	14.5 – 20.8	0	0	0	0	3.5	3.5	4.0	3.0	3.0	3.0	5.0	5.0
	Enough	20.9 – 27.2	10	9	50	52.9								
	Good	27.3 – 33.6	9	7	45	41.2								
	Very good	33.7 – 40.0	1	1	5	5.9								
VII B	Very not good	8.0 – 14.4	0	0	0	0								
	Not good	14.5 – 20.8	0	1	5	2	3.5	3.5	3.5	3.5	3.0	2.0	5.0	4.0
	Enough	20.9 – 27.2	10	5	45	17.6								
	Good	27.3 – 33.6	9	11	45	80.4								
	Very good	33.7 – 40.0	1	0	5	0								

The description of students' attitudes towards science on the indicators of Fun in learning science is shown in the table 4.

Table 4. Description of Student Attitudes on Indicators of Fun in learning science

	Category	Interval	Freq		%		Mean		Median		Min		Max	
			F	M	F	M	F	M	F	M	F	M	F	M
VII A	Very not good	9.0 – 16.2	0	0	0	0								
	Not good	14.5 – 23.4	0	1	2.9	2.9	3.6	3.5	4.0	3.0	2.0	2.0	5.0	4.0
	Enough	23.5 – 30.6	3	6	37.1	51.4								
	Good	30.7 – 37.8	9	10	45.7	37.1								
	Very good	37.9 – 45.0	7	0	14.3	8.6								
VII B	Very not good	9.0 – 16.2	0	0	0	0								
	Not good	14.5 – 23.4	0	1	0	15	3.5	3.8	3.5	4.0	3.0	2.0	5.0	5.0
	Enough	23.5 – 30.6	10	15	50	70								
	Good	30.7 – 37.8	9	0	45	0								
	Very good	37.9 – 45.0	1	1	5	15								

Data is processed with Basic Statistics, which are statistics that are used to describe or analyze a statistic of research results but are not used for generalization/inference (Yarkoni, 2020). In the results of the descriptive statistical test of the attitude variable, there are two indicators. In the first indicator, namely the adoption of scientific attitudes contained in table 3, it can be seen that the most dominant percentage in this indicator is male students in class VII A and VII B in the good category. So it can be concluded that male students have an advantage in student attitudes towards indicators of scientific attitude adoption. Meanwhile, in the second indicator, namely the pleasure of learning science, which is contained in table 4, it can be seen that the most dominant category in this indicator is male students in grades VII A and VII B with a sufficient category. So it can be concluded that male students have an advantage in students' attitudes towards the indicators of happy learning science.

This study is in line with research conducted by (Setiawan, 2017), but in this study only tested one class and did not compare based on gender, while in this study tested two classes and also tested based on gender to find out the advantages possessed by female students. and male students.

The description of students' self-efficacy towards science on the indicators of Individual expectations of abilities take is shown in the Table 5.

Table 5. Description of self-efficacy on Indicators of Individual expectations of abilities take

	Category	Interval	Freq		%		Mean		Median		Min		Max	
			F	M	F	M	F	M	F	M	F	M	F	M
VII A	Very not good	6.0 – 10.8	0	0	0	0								
	Not good	10.9 – 15.6	0	0	0	0	3.3	3.5	4.0	3.0	3.0	3.0	4.0	4.0
	Enough	15.7 – 20.4	10	13	50	65								
	Good	20.5 – 25.2	10	4	50	35								
	Very good	25.3– 30.0	0	0	0	0								
VII B	Very not good	6.0 – 10.8	0	0	0	0								
	Not good	10.9 – 15.6	0	0	0	0	3.3	3.5	3.0	4.0	3.0	3.0	4.0	4.0
	Enough	15.7 – 20.4	9	5	45	35.5								
	Good	20.5 – 25.2	11	12	55	60.5								
	Very good	25.3– 30.0	0	0	0	0								

The description of students' self-efficacy towards science on the indicators of experience not as an obstacle is shown in the Table 6.

Table 6. Description of self-efficacy on Indicators of experience not as an obstacle

	Category	Interval	Freq		%		Mean		Median		Min		Max	
			F	M	F	M	F	M	F	M	F	M	F	M
VII A	Very not good	5.0 – 9.0	0	0	0	0								
	Not good	10.0 – 13.0	1	1	5	5.5	3.2	3.3	3.0	3.0	3.0	3.0	4.0	4.0
	Enough	14.0 – 17.0	12	14	60	75.0								
	Good	18.0 – 21.0	7	2	35	15.5								
	Very good	22.0 – 25.0	0	0	0	0								
VII B	Very not good	5.0 – 9.0	0	0	0	0								
	Not good	10.0 – 13.0	2	0	10	0	3.5	3.6	3.0	4.0	2.0	3.0	5.0	5.0
	Enough	14.0 – 17.0	8	9	40	65.5								
	Good	18.0 – 21.0	7	5	40	25.5								
	Very good	22.0 – 25.0	2	3	10	15								

In the results of the descriptive statistical test of the self-efficacy variable, there are two indicators. In the first indicator, namely the self-efficacy indicator: Individual expectations for the abilities contained in table 5 show that the most dominant percentage of this indicator is male students in grades VII A and VII B in the sufficient category. So it

can be said that male students have an advantage in students' attitudes towards scientific attitude indicators. While the second indicator, namely Take experience not as an obstacle, as shown in table 6, it can be seen that the most dominant category in this indicator is male students in grades VII A and VII B with sufficient and good categories. So it can be said that male students have an advantage in students' attitudes towards the indicators of happy learning science.

This study is in line with research conducted by (Utami & Wutsqa, 2017), but in this study only tested a few tests, while in this study tested a lot of tests, namely descriptive statistics, normality tests, linearity, T tests, and correlation tests so that in this study for a more complete and more detailed test.

Comparative Analysis

The normality test of students' attitude and self-efficacy in grades VII A and VII B is described in the Table 7:

Table 7. Normality test of attitude and self-efficacy class VII A and VII B

Variable	Gender	Kolmogorov-Smirnov			Shapiro-Wilk		
		Statistic	Df	Sig.	Statistic	Df	Sig.
Attitude	Female	,117	37	,200*	,973	37	,507
	Male	,321	37	,000	,610	37	,180
Self efficacy	Female	,167	37	,011	,705	37	,397
	Male	,182	37	,003	,738	37	,185

The linearity test of students' attitude and self-efficacy in grades VII A and VII B is described in the Table 8.

Table 8. Linearity test of attitude and science process skills of class VII A and VII B students

Variable	Gender	Signifikan
Attitude * self-efficacy	Female	.043
	Male	.024

The T-test of students' attitude and self-efficacy in grades VII A and VII B is described in the Table 9.

Table 9. T-test of student Attitude and self-efficacy of grade VII A and VII B students

Gender	Variable	N	Sig. (2-tailed)
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Female	Attitude	37	0.043
	Self-efficacy	37	0.047
Male	Attitude	37	0.035
	Self-efficacy	37	0.037

The correlation test of students' attitude and self-efficacy in grades VII A and VII B is described in the Table 10.

Table 10. Correlation test of attitude and self-efficacy for grades VII A and VII B

Gender	Variable	N	Pearson Correlation	Sig. (2-tailed)
Female	Attitude	37	0,562	0,032
Male	Self-efficacy	37	0,574	0,034

The first comparative test is the normality test. The data is normally distributed as seen from the significance value, if the significance value is > 0.05 then the data is normal. While the significance value < 0.05 , the data is not normal (Psaradakis & Vávra, 2020). Based on the results of table 7, the normality test obtained using the Kolmogorov-Smoniv test with a significance value > 0.05 in both classes, namely VII A and VII B, it can be concluded that the data is normally distributed. The next test is about linearity. For the calculation of the linearity test in the study using the Anova test with the help of the SPSS version 26 program with the criteria if the linearity sig < 0.05 then the data has a linear pattern (Liu et al., 2017). Linearity testing is done to see the linear relationship between two or more variables. Conditions in this test, if the significance value < 0.05 . Based on table 8, it can be seen that the results of the linearity test obtained a significance value of < 0.05 in both classes, namely VII A and VII B, it can be concluded that there is a linear relationship between attitude and self-efficacy. in grade VII A and VII B students.

The next test is the T test. T test is useful for knowing the comparison between two or more variables accurately using SPSS (Ernawati et al., 2021; Zurweni et al., 2021; Kamid et al., 2021). This test was conducted to determine the difference between the attitude variables and students' self-efficacy in science subjects. The requirement in this test is that if the significance value is > 0.05 , it can be said that the variable has no difference. If the significance value < 0.05 , then the variable has a significant difference. From table 9, it is known that there are differences in attitudes and self-efficacy of students of class VIIA and VII B IPA towards science subjects. This is evidenced by the value of sig (2-tailed) < 0.05 . Furthermore, the correlation test is where the correlation is carried out to determine the relationship between two variables, so that there is no dependent variable and independent variable (Ernawati et al., 2021; Zurweni et al., 2018; Li et al., 2021). This test was conducted to determine the relationship of variables to science subjects. The requirement in this test is that if the significance value is > 0.05 , it can be said that the variable has no relationship. If the significance value < 0.05 , then the variable has a significant relationship. From table 10 it is known that there is a relationship between attitudes and self-efficacy of students in grades VII A and VII B with science subjects. This is evidenced by the value of sig (2-tailed) < 0.05 .

This research is in line with previous research conducted by (Erdogan, 2017; Fitriani et al., 2021; Sriyanti, 2021) on students' attitudes towards science. However, previous research only tested a few tests, one of which was measuring the percentage, where tests such as descriptive status on the test only focused on the percentage value. Meanwhile, in this study, descriptive statistical tests were carried out by testing category, percentage, mean, median, min, max. In this study also tested the relationship by doing a correlation test. where the correlation test conducted in this study was to determine the ability to solve problems closely with students' beliefs about the problem, because students' confidence in solving problems will affect student learning outcomes (Utami & Wutsqa, 2017). So that previous research did not test some of the tests carried out by this study in a more complete and detailed manner.

This research is also in line with previous research conducted by (Hesbol, 2019; Kiel et al., 2020; Zysberg & Schwabsky, 2021) on student self-efficacy. However, previous studies only tested descriptive statistics and correlations and did not compare two classes and students' gender to determine the comparison and relationship to student self-efficacy. One of the tests that were not carried out by previous research was not testing the normality of the data. Where normality testing aims to find out whether the average student attitude comes from a scattered population (Sultan, 2017). So that previous research did not test some of the tests carried out by this study as a whole. However, the research conducted has a weakness where the researcher does not carry out several tests only in one school. In addition, the data processed is only limited to measuring the comparison and relationship between attitudes and student self-efficacy in the two classes and does not use other variables. Therefore, the researcher suggests that further research is expected to add variables so that it does not only measure comparisons and relationships but also the influence between variables.

Conclusion

Based on the results of research on attitudes and self-efficacy of junior high school students towards science, it can be concluded that gender differences are one of the factors that cause differences and affect attitudes and self-efficacy between female and male students. This can be seen in the significance value of the t-test for the attitude variables of female and male students respectively 0.043, 0.035, and the self-efficacy variables of female and male students are 0.047, 0.037, respectively. The significance value <0.05 indicates that there are differences in attitudes and self-efficacy between female and male students. Furthermore, the correlation test for female and male students was 0.032, 0.034, respectively. The significance value <0.05 indicates that there is an influence of attitude and self-efficacy between female and male students. Then this difference can be seen in detail in the descriptive statistical test where the percentage of male students is greater than female students.

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