

Comparison and Correlation Between Attitude and Process Skills in Mathematics: The Case of Public and Islamic Middle School in Indonesia

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Abstract: Comparison and Correlation between Attitude and Process Skills in Mathematics: The Case of Public and Islamic Middle School in Indonesia. Objectives: to find out the comparison and relationship between process skills and students' interest in learning mathematics in junior high school. **Methods:** using a quantitative descriptive survey design. A total of 140 students from SMPN 35 Batanghari and MTsN 5 Batanghari were purposively selected as research samples. Data analysis used descriptive and inferential statistics. **Findings:** The results of the t-test of students' process skills and interest in learning at SMPN 35 Batanghari and MTsN 5 Batanghari obtained sig. (2-tailed) is less than 0.05. Analysis of the correlation between the interests and process skills of students obtained the value of sig. (2-tailed) in each school is less than 0.05. **Conclusion:** There are differences in students' interest and process skills between each school and students' interest is significantly correlated with process skills. Interest in learning will create curiosity, so that it can improve students' process skills.

Keywords: mathematics, attitude, process skills, public school, Islamic school.

Abstrak: Perbandingan dan Korelasi antara Sikap dan Keterampilan Proses dalam Matematika: Kasus SMP Negeri dan Islam di Indonesia. Tujuan: untuk mengetahui perbandingan dan hubungan antara keterampilan proses dan minat siswa pada pelajaran matematika di sekolah menengah pertama. **Metode:** menggunakan desain survei deskriptif kuantitatif. Sebanyak 140 siswa dari SMPN 35 Batanghari dan MTsN 5 Batanghari dipilih secara purposive sebagai sampel penelitian. Analisis data menggunakan ilmu statistik deskriptif dan inferensial. **Temuan:** Hasil uji-t keterampilan proses siswa dan minat belajar siswa di SMPN 35 Batanghari dan MTsN 5 Batanghari diperoleh sig. (2-tailed) lebih kecil dari 0,05. Analisis korelasi antara minat dan keterampilan proses siswa diperoleh nilai sig. (2-tailed) di setiap sekolah kurang dari 0,05. **Kesimpulan:** Terdapat perbedaan minat dan keterampilan proses siswa dimasing-masing sekolah dan minat siswa berkorelasi signifikan dengan keterampilan proses. Minat belajar akan menimbulkan rasa ingin tahu, sehingga dapat meningkatkan keterampilan proses siswa.

Kata kunci: matematika, sikap, keterampilan proses, sekolah negeri, sekolah berbasis Islam.

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■ INTRODUCTION

Education is a process of changing attitudes and behavior of a person or group of people through learning. Education is a basic need that is absolutely necessary and very important, to be implemented in all circles. Given the expectations and practical demands, technologically advanced educational structures and modern approaches that are relevant to the delivery of intelligent education can offer choices for a better future generation (Purwanti and Musadad 2019; Singh and Miah 2020; Utaminingsih, Rahayu, and Andini 2018). To achieve educational goals, a teacher as an educator has a very important role and influence for students, teachers as educators are expected to facilitate the development of cognitive abilities and students' critical thinking skills. Therefore, teacher confidence is an important factor that guides the class in learning activities to create an atmosphere of teaching and learning, which is active, fun and impresses students in learning activities so that students can absorb and receive the knowledge they get as a provision for their future life (Nurazizah, Sinaga, and Jauhari 2017; Reichert, Lange, and Chow 2021; Sholihat, Samsudin, and Nugraha 2017). Education is one of the strategies in preparing human resources, formally, school education provides opportunities for human resources to increase and develop potential, qualified and highly competitive human resources must be prepared through quality education in order to produce a generation that is able to face global competition in accordance with the aim of education in Indonesia, namely to develop the abilities and potential of students to have knowledgeable, creative, and independent individuals (Khairul, Apertha, and Yusup 2018; Sa'idah, Yulistianti, and Megawati 2019; Widjayanti, Masfingatin, and Setyansah 2019).

By obtaining education, every human being acquires a scientific attitude that comes from learning Mathematics and Natural Sciences.

At the education level, scientific knowledge and attitudes can be obtained. Scientific attitude is an important part of judgment which is a combination of a number of mental habits or tendencies to react in certain ways to problematic situations (Mediartika & Aznam, 2018; Metzger & Fehr, 2018; Jufriada et al., 2019). Scientific attitude is a very important aspect in simple scientific activities where science educators tend to distinguish two types in the discipline of science attitude and scientific attitude and assessment of scientific attitude in the form of non-test assessment (Dewi et al., 2017; Sole & Angraeni., 2017; Tretter et al., 2019). Basically there is still uncertainty about which attitude and teaching approach, associating with students' scientific intentions so that it can be used to inspire more students to study science subjects, taken from the many scientific attitudes that must be applied in studying physics (J. Sabrina et al., 2017; Astalini et al., 2018; Mujtaba et al., 2018;). Scientific attitude by students is useful so that students can be consistent in every situation in participating in learning activities, especially in Mathematics and Natural Sciences lessons.

Mathematics learning consists of mathematics and science. Mathematics is a basic science that is taught to children from an early age. Apart from mathematics as a basic science, its utilization and application to various disciplines paved the way for its perception as a useful and useful science among ordinary people with, video projectors are used to facilitate the sharing and collective development of mathematical ideas (Clivaz and Miyakawa 2020; Rasiman, Prasetyowati, and Education 2020; Yilmaz 2020). Mathematics is one of the most important subjects, a universal science that underlies the

development of modern technology, has an important role in various disciplines and advances the human mind for that teaching mathematics in early grades is very important for students' understanding of how to use mathematics in everyday situations. days and is the basis for understanding mathematics in middle and high school (Brandenberger, Hagenauer, and Hascher 2017; Corp 2012; Muslimin, Indaryanti, and Susanti 2017). Mathematics is a subject taught from Elementary School (SD) to Higher Education which has abstract, logical, and systematic characteristics and Mathematics is everywhere from daily routines to development (Arifin and Herman 2018; Çekirdekci 2020; Widyastuti et al. 2019). Science and Mathematics learning are interconnected and important to learn.

Students who already have an interest in learning will make it easier for students in understanding the concepts in the learning. Interest in learning is one of the internal factors that can influence and support student learning achievement (Hemayanti et al., 2020; Heriyati, 2017; Tambunan, 2021). Interest in learning is the desire or tendency of individuals to obtain pleasure without coercion so that it can lead to changes in knowledge, skills, and behavior (Meganingtyas, Winarni, and Murwaningsih 2019; Permatasari and Info 2019; Prihatini 2017). Interest will encourage students to easily obtain material in every process in learning and find a person's creativity in his soul with what has become his interest (Astuti 2017; Fauziyah and Triyono 2020; Kawet 2017). The learning model is also influential in fostering student interest in learning.

Skills are important things that everyone must have (Darmaji, et al., 2020). Students' Perceptions of Mobile Learning-Based Guidebooks (Darmaji, et al., 2020). The science learning process in elementary schools should

provide the widest opportunity for students to develop process skills (Asrial, et al., 2021). Process skills are very important for every student to have. The process towards life skills requires an exercise and requires a process called process skills (Lusidawaty et al., 2020; Yusri, 2018; Asmi & Hasan, 2017). Skills are very important to generate new knowledge through learning activities to improve students' understanding (Vansteensel et al., 2017; Stender et al., 2018; Vartiainen & Kumpulainen, 2020). Process skills are processes designed in such a way that students understand facts, concepts, and relate them to the theories and attitudes of students themselves (Iswatun et al., 2017; Sakdiah et al., 2018; Gunawan et al., 2019). For this reason, student knowledge will make students have good process skills as well.

Previous research conducted by Nofita, et al., (2017) showed that student interest in learning had an influence on learning achievement but in this study it was only carried out in one school, and research conducted by Astuti (2017) also showed that student interest in learning have an influence on the achievement of learning outcomes but the more influential in learning is self-concept. Then the research conducted by Prihatini (2017) showed that high interest in learning had an effect on good learning outcomes. However, in previous studies, the interest variables have not been discussed in detail per indicator.

In previous research conducted by Fujiyanti et.al., (2018) stated that students who have high process skills will have better learning achievements than students who have low process skills. observation and multiple choice. Then in the research conducted by Darmaji, et al., (2020) namely analyzing students' science process skills on flat mirror reflection material which was only carried out in one school and in the article only descriptive tests were carried out

or only presented the analysis. Based on the explanation, it can be seen how important or influential process skills and student interests are on student achievement. Therefore, the researcher concludes the formulation of the problem as follows:

1. How do students' process skills compare in triangle and quadrilateral learning materials in SMP and MTs?
2. How is the comparison between students' interest in triangle and quadrilateral learning materials in SMP and MTs?
3. What is the relationship between process skills and students' interest in triangle and quadrilateral learning materials in SMP and MTs?

■ METHODS

Participants

Participants in this study consisted of 140 students, drawn from the population at MTsN 5 Batanghari and SMPN 35 Batanghari in Batanghari Regency. The sampling technique in this study used simple random sampling. Simple random sampling is the simplest sampling design and each element that makes up the population is given the same opportunity to be selected as a sample (Purnomo and Bramantoro 2018; Umrati and Wijaya 2020). The subjects taken were class VII A and VII B

of each school where in one class there were 35 students, meaning that in one school there were 70 students as participants.

Research Design and Procedures

This research is a type of quantitative research with descriptive data analysis. This study uses a descriptive quantitative survey design method. The purpose of quantitative research is to obtain an explanation of a theory and the laws of reality and quantitative research is developed using mathematical models, theories and or hypotheses (Hermawan, 2019). Survey research is generally carried out for generalizations from in-depth observations. Collecting data in the form of attitude activities carried out using descriptive statistics based on the categories given by the researcher. Next, identify the results for follow-up. At the data collection stage, questionnaires were given to 70 students in each school, namely SMPN 35 Batanghari and MTsN 5 Batanghari. From the data, data analysis was then carried out, namely data coding, filtering the appropriate data and analyzing data. From the data, data analysis was then carried out, namely data coding, filtering the appropriate data and analyzing data. The data needed in this research were collected from SMPN 35 Batanghari and



Figure 1. Research procedure

MTsN 5 Batanghari. There is also a procedure for collecting data in this research in accordance with the following structure:

Instrument

The instrument in this study used a questionnaire with the number of statement

items as many as 47 valid statements using a Likert scale.). The assessment instrument is one of the latest experimental assessment instruments in the field of assessment (Caltagirone et al., 2005; Purwanti et al., 2020). The scale consists of 5 points with a score of strongly agree is 5, agree is 4, neutral

is 3, disagree is 2, and strongly disagree is 1. Each statement is representative of each Process Skills and Interest Indicator. The focus of this research is on 3 dimensions of process skills, namely communication, measurement, and conclusion. Then the indicators used to measure interest are student involvement, feelings of pleasure and learning materials and teacher attitudes. For the questionnaire grid for this research, can be seen in table 2 and table 4.

The description of the questionnaire instrument for students' process skills in mathematics subjects consists of several

indicators including observation (3 items), communication (4 items), Classification (5 items), Measure (3 items), Conclusion (4 items), Prediction (5 items).), Arrange tables (3 items), Obtain and process data (4 items), Trial analysis (5 items), Creating a hypothesis (4 items), Designing experiments (5 items) and Doing an experiment (4 items). Due to the student's process skills questionnaire in mathematics subjects with flat-sided geometry using a Likert scale consisting of 4 categories, there are intervals in each category that can be seen in table 3. The description of the category of student process skills in mathematics

Table 3. Categories of student process skills in mathematics with triangles and quadrilaterals

Category	Indicator Interval		
	Communication	Measuring	Conclusion
Very Not Good	4 – 7	3.00 – 5.25	4 - 7
Not good	8 – 10	5.26 – 7.50	8 - 10
Good	11 – 13	7.51 – 9.75	11 – 13
Very good	14 – 16	9.76 – 12.00	14 – 16

subjects with triangle and quadrilateral material is as follows:

The questionnaire instrument for student interest in triangular and quadrilateral mathematics subjects consists of several indicators, namely Attention in learning (4 items), Student engagement (5 items), Feeling happy (5 items), Curiosity (5 items), Learning materials and teacher attitudes (6 items), and Benefits of

subjects (5 items). Due to the student interest questionnaire in mathematics with triangle and quadrilateral material using a Likert scale consisting of 5 categories, there are intervals in each category, and the intervals in each category can be seen in table 5. The description of the category of student interest in mathematics with triangle and quadrilateral material is as follows:

Table 5. Category of student interest in mathematics subjects with triangles and quadrilaterals

Category	Interval Indicator		
	Student Involvement	Student Involvement	Learning materials and teacher attitudes
Very Not Good	5-9	5-9	6.0 – 9.8
Not good	10-13	10-13	10.9 – 15.6
Enough	14-17	14-17	15.7 – 20. 4
Good	18-21	18-21	20.5 – 26.2
Very good	22-25	22-25	25.3 – 30.0

Data analysis

The results of the student's questionnaire answers on process skills and interests were

analyzed using descriptive statistics and parametric inferential statistics. Descriptive statistics are often referred to as frequency

distributions that provide accurate measurements from the smallest to the largest data (Hartanto & Yuliani, 2019; Khosharay et al., 2018; Al Mutairi, 2018). The descriptive statistics used in its presentation use estimated values and experimental values, from two parameters, namely the mean, arithmetic, and standard deviation (Khalil & Najm, 2018; Haj-Kacem et al., 2017; Lapinova & Saichev, 2017). Then parametric inferential statistical analysis, namely t-test to determine differences in student process skills in each school and student interest and correlation test to determine the relationship between student interest and student process skills. With the basis of decision making for the t test and correlation, namely the value of sig. (2-tailed) < 0.05 . Before doing the T test and correlation there are conditions that must be met first,

namely the data is normally distributed, homogeneous and linear. Then the assumption test is carried out, namely the normality test, homogeneity test, and linearity test.

■ RESULT AND DISCUSSIONS

The data obtained were from class VIII A, VIII B at SMP Negeri 35 Batanghari and VIII A, VIII B at MTsN 5 Batanghari. Then the data obtained were analyzed using SPSS based on class for descriptive statistics, assumption testing and hypothesis testing on triangle and quadrilateral mathematics subjects. The following describes the results of descriptive statistics on students' process skills and students' interest in mathematics with flat-sided geometry, which results will be obtained from distributing questionnaires in class VIII A and VIII B at SMPN 35 Batanghari and MTsN 5 Batanghari.

Table 6. Description of students' process skills on mathematics subjects with triangles and rectangles on communication indicators

Student Response	Interval	F	%	Category	Mean	Med	Min	Max	
SMPN 35 Batanghari	Vii A	4 – 7	3	8.6%	Very Not Good	2.9429	3	1	4
		8 – 10	5	14.3%	Not Good				
		11 – 13	18	51.4%	Good				
		14 – 16	9	25.7%	Very Good				
Vii B	4 – 7	0	0%	Very Not Good	3.1714	3	2	4	
	8 – 10	5	14.3%	Not Good					
	11 – 13	19	54.3%	Good					
	14 – 16	11	31.4%	Very Good					
MTsN 5 Batanghari	Vii A	4 – 7	2	5.7%	Very Not Good	3	3	1	4
		8 – 10	6	17.1%	Not Good				
		11 – 13	17	48.6%	Good				
		14 – 16	10	28.6%	Very Good				
Vii B	4 – 7	2	5.7%	Very Not Good	2.7429	3	1	4	
	8 – 10	10	28.6%	Not Good					
	11 – 13	18	51.4%	Good					
	14 – 16	5	14.3%	Very Good					

Descriptive Statistics Test

Process skills of students in mathematics with triangles and quadrilaterals at SMPN 35 Batanghari and MTsN 5 Batanghari. The description of the results for the variable process

skills of students towards mathematics subjects in the material of triangles and quadrilaterals VIII A and VIII B at SMPN 35 Batanghari and MTsN 5 Batanghari on communication indicators are as follows:

Based on table 6, SMPN 35 Batanghari is more dominant in the good category, in class VII B the dominant is in the good category, then at MTsN 5 Batanghari in class VII A and VII B.

The description of the results for the variable process skills of students towards mathematics subjects at SMPN 35 Batanghari and MTsN 5 Batanghari on measuring indicators are showed in Table 7.

Table 7. Description of students' process skills towards mathematics subjects with triangle and quadrilateral material on measuring indicators

Student Response	Interval	F	%	Category	Mean	Med	Min	Max	
SMPN 35 Batanghari	VII A	3.00 – 5.25	12	34.3%	Very Not Good	2.2	2	1	4
		5.26 – 7.50	8	22.9%	Not good				
		7.51 – 9.75	11	31.4%	Good				
		9.76 – 12.00	4	11.4%	Very good				
	VII B	3.00 – 5.25	5	14.3%	Very Not Good	2.6	3	1	4
		5.26 – 7.50	11	31.4%	Not good				
		7.51 – 9.75	12	34.3%	Good				
		9.76 – 12.00	7	20%	Very good				
MTsN 5 Batanghari	VII A	3.00 – 5.25	8	22.9%	Very Not Good	2.5	3	1	4
		5.26 – 7.50	8	22.9%	Not good				
		7.51 – 9.75	12	34.3%	Good				
		9.76 – 12.00	7	20%	Very good				
	VII B	3.00 – 5.25	7	20%	Very Not Good	2.4	2	1	4
		5.26 – 7.50	14	40%	Not good				
		7.51 – 9.75	7	20%	Good				
		9.76 – 12.00	7	20%	Very good				

Based on the results above, it can be seen that the more dominant for SMPN 35 Batanghari class VII A is in the very bad category, in class VII B the dominant is in the good category, then in MTsN 5 Batanghari in class VII A which is

more dominant in the good category and The dominant VII B is in the bad category.

The description of the results for the variable process skills of students towards mathematics subjects in the material of

Table 8. Description of students' process skills on mathematics subjects with triangle and quadrilateral material on conclusion indicators

Student Response	Interval	F	%	category	Mean	Med	Min	Max	
SMPN 35 Batanghari	VII A	4 – 7	3	8.6%	Very Not Good	2.457	2	1	4
		8 – 10	15	42.9%	Not good				
		11 - 13	15	42.9%	Good				
		14 - 16	2	5.7%	Very good				
	VII B	4 – 7	5	14.3%	Very Not Good	2.285	2	1	4
		8 – 10	18	51.4%	Not good				
		11 - 13	9	25.7%	Good				
		14 - 16	3	8.6%	Very good				
MTsN 5 Batanghari	VII A	4 – 7	3	8.6%	Very Not Good	2.571	3	1	4
		8 – 10	11	31.4%	Not good				
		11 - 13	19	54.3%	Good				
		14 - 16	2	5.7%	Very good				
	VII B	4 – 7	3	8.6%	Very Not Good	2.485	3	1	4
		8 – 10	14	40.0%	Not good				
		11 - 13	16	45.7%	Good				
		14 - 16	2	5.7%	Very good				

triangles and quadrilaterals VII A and VII B at SMPN 35 Batanghari and MTsN 5 Batanghari on the conclusion indicators are in Table 8.

Based on the results above, it can be seen that SMPN 35 Batanghari class VIIA is in good and bad categories, in class VII B the dominant is in the bad category, then at MTsN 5 Batanghari

in VII A and VII B dominant in the category good. The description of the results for the variables of student interest in mathematics subjects in the material of triangles and quadrilaterals VII A and VII B at SMPN 35 Batanghari and MTsN 5 Batanghari on communication indicators are as follows:

Table 9. Description of students' learning interest in mathematics subjects with triangles and rectangles on the indicators of student involvement

Student Response	Interval	F	%	Category	Mean	Med	Min	Max	
SMPN 35 Batanghari	5-9	0	0 %	Very Not Good	3.628	4	2	5	
	10-13	2	5.7 %	Not good					
	14-17	13	37.1%	Good					
	18-21	16	45.7%	Very good					
	22-25	4	11.4%	Very Not Good					
	VII B	5-9	0	0%	Not good	3.97	4	2	5
		10-13	1	2.9%	Good				
		14-17	7	20.0%	Very good				
		18-21	19	54.3%	Very Not Good				
		22-25	8	22.9%	Not good				
MTsN 5 Batanghari	5-9	0	0 %	Good	3.77	4	2	5	
	10-13	1	2.9 %	Very good					
	14-17	12	34.3%	Very Not Good					
	18-21	16	45.7%	Not good					
	22-25	6	17.1%	Good					
	VII B	5-9	0	0%	Very good	3.6	4	2	5
		10-13	2	5.7 %	Very Not Good				
		14-17	15	42.9%	Not good				
		18-21	13	37.1%	Good				
		22-25	5	14.3%	Very good				

Based on the above results, it can be seen that SMPN 35 Batanghari class VIIA is in good category, class VII B is dominant in the good category, then at MTsN 5 Batanghari in class VII A and VII B is dominant in the sufficient category.

The description of the results for the variable of student interest in mathematics in the material of triangles and quadrilaterals VIIA and VII B at SMPN 35 Batanghari and MTsN 5 Batanghari on the indicator of feeling happy is as follows:

Table 10. Description of students' learning interest in mathematics subjects with triangles and rectangles on indicators of feeling happy

Student Response	Interval	F	%	Category	Mean	Med	Min	Max
VII A	5-9	0	0 %	Very good	3.457	3	2	5
	10-13	3	8.6%	Very Not Good				
	14-17	15	42.9%	Not good				

SMPN 35 Batanghari		18-21	15	42.9%	Good					
		22-25	2	5.7%	Very good					
	VII B		5-9	0	0%	Very good				
			10-13	1	2.9%	Very Not Good				
			14-17	13	37.1%	Not good	3.657	4	2	5
			18-21	18	51.4%	Good				
	22-25	3	8.6%	Very good						
MTsN 5 Batanghari		5-9	0	0%	Very good					
		10-13	1	2.9%	Very Not Good					
	VII A		14-17	16	45.7%	Not good	3.657	4	2	5
			18-21	12	34.3%	Good				
			22-25	6	17.1%	Very good				
			5-9	0	0%	Very good				
VII B		10-13	2	5.7%	Very Not Good					
		14-17	16	45.7%	Not good	3.5143	3	2	5	
		18-21	14	40.0%	Good					
		22-25	3	8.6%	Very good					

Based on the above results, it can be seen that SMPN 35 Batanghari class VII A is in the sufficient and good category, in class VII B the dominant is in the good category, then at MTsN 5 Batanghari in class VII A and VII B is dominant in the sufficient category.

The description of the results for the variable of student interest in mathematics in the triangle and quadrilateral material VIII A and VIII B at SMPN 35 Batanghari and MTsN 5 Batanghari on indicators of learning materials and teacher attitudes are as follows:

Table 11. Description of students' learning interest in mathematics subjects with triangles and rectangles on indicators Learning materials and teacher attitudes

Student Response	Interval	f	%	category	Mean	Med	Min	Max		
SMPN 35 Batanghari		6.0 – 9.8	0	0%	Very good					
	VII A		10.9 – 15.6	1	2.9%	Very Not Good				
			15.7 – 20.4	15	42.9%	Not good	3.685	4	2	5
			20.5 – 25.2	13	37.1%	Good	7			
			25.3 – 30.0	6	17.1%	Very good				
	VII B		6.0 – 9.8	0	0%	Very good				
			10.9 – 15.6	2	5.7%	Very Not Good				
			15.7 – 20.4	13	37.1%	Not good	3.657	4	2	5
		20.5 – 25.2	15	42.9%	Good					
MTsN 5 Batanghari		25.3 – 30.0	5	14.3%	Very good					
	VII A		6.0 – 9.8	0	0%	Very good				
			10.9 – 15.6	0	0%	Very Not Good				
			15.7 – 20.4	7	20%	Not good	3.914	4	3	5
			20.5 – 25.2	24	68.6%	Good	3			
		25.3 – 30.0	4	11.4%	Very good					
	6.0 – 9.8	0	0%	Very good						

	10.9 – 15.6	1	2.9%	Very Not Good				
VII B	15.7 – 20.4	13	37.1%	Not good	3.742	4	2	5
	20.5 – 25.2	15	42.9%	Good	9			
	25.3 – 30.0	6	17.1%	Very good				

Based on the above results, it can be seen that SMPN 35 Batanghari class VII A is in the sufficient category, in class VII B the dominant is in the good category, then at MTsN 5 Batanghari in class VII A and VII B is dominant in the sufficient category.

Next, we will analyze the data that has been obtained from class VII A and VII B at SMPN 35 Batanghari and MTsN 5 Batanghari using the assumption test. Classical assumption test is a statistical requirement that must be met in multiple linear regression analysis based on ordinary least squares (OLS). The classical assumption test also does not need to be carried out for linear regression analysis that aims to calculate the value of certain variables (Duli, 2019). In this study, there will be 2 types of assumption tests, namely normality tests, homogeneity test and linearity tests. Here are the results of the tests that have been tested.

The purpose of the normality test is to find out whether the empirical data we get from the field is in accordance with the theoretical distribution. The combination of the Kolmogorov-Smirnov test is very sensitive. If the results of the normality test of the variables obtained data are normally distributed (p value > 0.05), then the data category is based on the mean. On the other hand, if the results of the variable normality test show that the data is not normally distributed (p value < 0.05), then the data category is based on the median (Sulung & Yasril, 2020). The results of the normality test using kolmogorov-smirnov and Shapiro-wilk were obtained with a significance number of more than 0.05 ($\text{sig} > 0.05$) so that H_0 was accepted, which means that the four groups of data in this study were normally

distributed (Sudarmika, at al., 2020) . The normality test was applied to determine whether the pretest scores of students in the experimental and control groups showed a normal distribution or not. Then the normality test results table (Yilmaz, 2020).

The results of the Normality Test of student learning process skills in learning mathematics with triangles and quadrilaterals at SMPN 35 Batanghari obtained a significance value of 0.187, which means that the data is normally distributed and the results of the normality test at MTsN 5 Batanghari are obtained a significance value of 0.200, which means that the data is normally distributed. The results of the Normality Test of student interest in learning mathematics with triangles and quadrilaterals at SMPN 35 Batanghari obtained a significance value of 0.200 which means that the data is normally distributed and the results of the normality test at MTsN 5 Batanghari obtained a significance value of 0.063, which means that the data is normally distributed.

The results of the Normality Test of student learning process skills in learning mathematics with triangles and quadrilaterals at SMPN 35 Batanghari obtained a significance value of 0.187, which means that the data is normally distributed and the results of the normality test at MTsN 5 Batanghari are obtained a significance value of 0.200, which means that the data is normally distributed. The results of the Normality Test of student interest in learning mathematics with triangles and quadrilaterals at SMPN 35 Batanghari obtained a significance value of 0.200 which means that the data is normally distributed and the results of the normality test at MTsN 5

Batanghari obtained a significance value of 0.063, which means that the data is normally distributed.

Linearity test serves to determine the relationship between the independent variable and the dependent variable. Provided that if the value of sig. Deviation from Linearity < 0.05 then the variables are linearly related (straight). The linearity test aims to determine the similarity of the regression line between the independent variable and the dependent variable (Atun & Latupeirisa, 2020). The linearity test results obtained the value of sig. at SMPN 35 Batanghari 0.029 where the result is <0.05 then at SMPN 35 Batanghari the variables are interrelated, as well as at MTsN 5 Batanghari the value of sig. obtained 0.031 <0.05, meaning that the variables in the school are interrelated. So the students' process skills and students' interest in mathematics subjects

in the triangle and quadrilateral material in each school are linearly related.

Hypothesis testing is a procedure that is carried out and aims to decide whether to accept or reject the hypothesis regarding population parameters. In this study, two hypothesis tests will be conducted, namely the T test and the correlation test. The t-test is used to partially test the effect of the independent variable on the dependent variable and can be used to determine the hypothesis test of each variable (Priyastama, 2017; Imron, 2019). The t-test is divided into 3 (three) types, namely; one sample t-test, paired sample t-test (dependent sample t-test) and independent sample t-test (Yusuf, 2019). The basis for decision making is if the value of sig. (2-tailed) > 0.05 then there is no significant difference, and if the value of sig. (2-tailed) < 0.05 then there is a significant difference. The following table are the results of the T test from the data obtained using the independent sample t-Test.

Table 16. T-Test test of student process skills students' interest in the material of triangles and quadrilaterals for class VII at SMPN 35 Batanghari and MTsN 5 Batanghari

Variable	School Name	N	Sig. (2-tailed)
Process skills	SMPN 35 Batanghari	70	0.029
	MTsN 5 Batanghari	70	
Student interest	SMPN 35 Batanghari	70	0.045
	MTsN 5 Batanghari	70	

The t-test hypothesis test is a hypothesis test used to find out whether there is a difference in the average of the samples taken so that the t-test is also known as the average test (Yusuf & Daris, 2018). T test of the data obtained by using the independent sample t-Test. The first is in Table 16. T-Test test of process skills of class VII students at SMPN 35 Batanghari and MTsN 5 Batanghari based on table 16 it can be seen that the value of sig. (2-tailed) data is 0.029 where the value is more than 0.05, which means that the data has a significant difference. The following table shows the results of the T-test for the interest

of grade VII students at SMPN 35 Batanghari and MTsN Batanghari in Table 17. T-Test test for the interest of grade VII students at SMPN 35 Batanghari and MTsN 5 Batanghari. (2-tailed) data is 0.045 where the value is more than 0.05, which means that the data has a significant difference.

Correlation test is a statistical analysis to see the relationship between two variables with numerical data (Hardisman, 2020). The results for the correlation test of process skills and student interests are as follows:

Table 18. Correlation test of process skills and student interest at SMPN 35 Batanghari and MTsN 5 Batanghari

School Name	Variable	Pearson Correlation	Sig. (2-tailed)
SMPN 35 Batanghari	Interest	0.666	0.040
	Process skills		
MTsN 5 Batanghari	Interest	0.665	0.042
	Process skills		

The results for the correlation test of process skills and student interests are in table 18. Test the correlation of process skills and student interest in triangle and quadrilateral mathematics subject matter. Based on the results in table 18 obtained the value of Sig. (2-tailed) is 0.040, Pearson Correlation 0.665 at SMPN 35 Batanghari where the value is <0.05 , it means that there is a relationship between the correlated variables and the Sig value. (2-tailed) is 0.42 Pearson Correlation 0.665 in MTsN 5 Batang Hari where the value is <0.05 , it means that there is a relationship between the correlated variables.

In previous research conducted by Hamidah & Kusuma (2021) revealed that the online-based flipped classroom model can improve students' mathematical results and interest. This research is in line with the current research. The difference is that the current research analyzes students' process skills and students' interest in learning mathematics. In previous studies also examined students' interest in learning mathematics with findings showing that there had been a significant increase in student interest in learning scores with the application of the integrated thematic learning model of character (Syamsuddin et al., 2021). The difference is that the current research focuses on students' interest and process skills.

In a previous study conducted by Elvanisi, at al. (2018), which is to analyze the science process skills of high school students which aims to determine the percentage level of mastery of science process skills of high school students in

the Districts of Bukit Kecil and Ilir Barat I Palembang. The limitation of this article is that it only analyzes science process skills with 7 indicators, namely observing, grouping, interpreting, predicting, formulating hypotheses, planning experiments, communicating, and in this article only discusses non-mathematical science process skills with indicators measuring and concluding. This research is in line with previous research conducted by Otoo et al. (2018) the results of the study showed that students' self-confidence had a direct effect on students' interest in learning mathematics and students' knowledge of the usefulness of mathematics indirectly increased students' interest in mathematics. In previous research which is in line with current research, namely Park and Han (2021) regarding students' interest in learning mathematics.

In previous research which is in line with current research, namely Atabey & Topcu (2020) with the result that there is a statistically significant relationship between student skills and student interests. In previous research which is in line with current research, namely Abari and Rejoice (2021) with the results of the study showing that there is a significant effect of student-made models on high school students' interest in mathematics and also that there is no significant effect of student-made models on male and female high school students' interest in mathematics. However, previous research only focused on student skills in the 21st century, so this research can be an update from previous research that examines student process skills in

learning mathematics in junior high schools. This study was conducted to determine the comparison of process skills and student interest in triangle and quadrilateral mathematics at SMPN 35 Batanghari and MTsN 5 Batanghari, and to determine the relationship between process skills and student interest at SMPN 35 Batanghari and MTsN 5 Batanghari. The indicator of process skills is communication where students can communicate well when learning mathematics, especially triangles and rectangles, namely students are able to describe empirical data on learning outcomes or observations to present the results obtained. Furthermore, on indicators measuring students who can take measurements at different quantities as well as possible and understand the concept of area and perimeter in triangle and quadrilateral material and conclusions, on this indicator students are expected to be able to draw conclusions from each lesson that has been taught, especially on triangle material. and quadrilaterals where students can conclude the type, nature, and can complete practice questions and can draw conclusions from what has been done.

And the indicator on the interest variable is student involvement in this indicator, it is hoped that the teacher can involve students in learning activities so that it can foster student interest, feelings of pleasure in this indicator are very influential for the success of students in following and absorbing the lessons given by educators, especially in learning mathematics, students who already have a sense of pleasure in learning make it easier for these students to be involved in every learning activity, and learning materials and teacher attitudes, in this case indicators of learning materials and teacher attitudes are very influential in growing students' interest in learning mathematics with triangle and

quadrilateral material. So that students who have an interest in a subject will make it easier for them to absorb the knowledge they are interested in and have good process skills. The purpose of using learning models in learning activities is to make students more interested in teaching and learning (Tanti et al., 2021).

■ CONCLUSIONS

The conclusion of this study is that each class in each school has different process skills and student interest in learning mathematics. Then it can be concluded that the results of this study between the variables of student interest in learning and student process skills in learning mathematics have a relationship. As for the implications of this research, it is carried out as a reference for educators in teaching so that they can foster student interest which later can also grow students' process skills in learning mathematics considering that students' interests and process skills are important to have and develop. The limitations of this study are that it only measures differences, comparisons and also the relationship between variables of interest and student process skills, so the researcher recommends that further research can measure the influence and also at other levels of education.

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