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Effect of Thinking Skill-Based Inquiry Learning Method on Learning Outcomes of Social Studies: A Quasi-Experimental Study on Grade VIII Students of MTSN 6 Tulungagung

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Abstract: The background underlying this study is due to the implementing of instruction methods that have not demonstrated thinking skill. The discussion of Social Studies material is also very broad, demanding students to possess thinking skill (critical thinking and creative thinking). Thinking skill is crucial to deal with problems in doing tasks in order to improve learning outcomes, or even to solve problems that exist in either students themselves or in their environment. In an effort to improve learning outcomes, teachers can adopt thinking skill-based inquiry learning method. The objective of this study is to (1) examine learning outcomes of Social Studies between those who use thinking skill-based inquiry learning method and those who adopt conventional method; (2) investigate the significant effect of using thinking skill-based inquiry learning method; and (3) analyzing the effect size of thinking skill-based inquiry learning method on the Social Studies learning outcomes. This article exploited a perceptible or measurable way, notably an apparent-empirical construction, in which thinking skill-based inquiry learning method was the independent variable and learning outcome was the dependent variable. The instruments used were test and documentation. This study used a saturated sampling technique. The population in this study was all grade 8 students. This study engaged 2 classes as the sample, namely class VIII-H as the control class consisting of 38 students, and class VIII-I as the experimental class comprising of 34 pupils. The statistics were analyzed using the t-test, and the aftermath capacity was calculated by using Cohen's formula. The outcome of this finding determined as follows (1) the learning outcomes of Social Studies of students who used thinking skill-based inquiry learning method was 80.91 on average, better than the students who used the conventional learning method; (2) it displayed that a significant reaction of reasoning competency-based question and reasoning instruction design or approach on the pupils learning reaction with the value of $t_{count} = 6.57$, and t_{table} at the 5% significance level was 1.65, indicating that the value of $t_{count} > t_{table}$, (3) the effect size of thinking skill-based inquiry learning method on the students' learning outcome was up to 91.9%, which was classified as the high percentage.

1. Introduction

Education occurs in diverse circumstances, formal, informal, or non-formal. Education is an important aspect of life. A nation will not develop well without being supported by a quality education. It is crucial for an educational academy to concern the quality education, as it will the nation to shape a good generation. According to the Pancasila and the 1945 Constitution, in Law no. 20 of 2003, the goal of education is to evolve and establish the possible of pupils to become human beings who have belief, truth and adherence to the Almighty God, are charitable, strong, tough, experienced, smart, sensible, adequate, competence, innovative, self-reliant, and become democratic and responsible citizens. Therefore, it is necessary for education to bloom, instruct and cultivate the life of the nation to face the disputes of the world that are growing rapidly in this era.

Social Science learning at the formal institution level is closely related to social science disciplines that are integrated with the humanities and natural sciences. They are packaged scientifically and pedagogically for the benefit of the learning process in schools. Hence, social studies at the school level basically aim to arrange, resemble and draw up pupils to be citizens who master awareness, education, intelligence, competence, characters, and morals that can be implied as the competence to clarify personal problems or civil; make decisions; and engage in various societies in order to become good citizens. In reference to the Graduate Competency Standard of Educational Unit (SKL-SP)



regarding Graduation Standards, students are also expected to have critical thinking skills that will be used for everyday life to solve problems.

The objective of social studies learning is to foster the potential of pupils, that is, to be brave in facing life's challenges as well as global challenges, without any feeling of being depressed. Hence, teachers must be able to encourage students to possess knowledge, skills, and high self-confidence to quickly adapt to the environment. Broadly speaking, learning strategies of Social Studies are grouped into pre-learning, whilst learning, and follow-up learning. In pre-learning strategy, the learning process cannot be done carelessly. Instead, it must be carefully designed. Thus, drawing up a lesson plan is a must.

In general, the factors that affect learning outcomes can be classified into 2 (two), namely subjective factors (factors that are derived from the pupils) and exterior factors (factors that originate outside the pupils). Subjective factors that affect learning outcomes are the characteristics of pupils, attitudes toward instruction, learning concentration, processing learning materials, exploring learning outcomes, self-confidence, study habits, and motivation to learn. Motivation is anything that encourages someone to act to do something. In learning, motivation is salient. Motivation is an absolute requirement for learning. Meanwhile, exterior factors affecting learning outcomes are social environment (including peer environment), curriculum, facilities, and teachers.

Plenty of problems surround Social Science learning; one of them is the teachers' method in teaching. The learning process of social studies in schools still tends to be teacher-centered. Teachers deliver the subject matter and students are required to memorize all the materials. The learning process is more oriented to the mastery of materials. This kind of learning process is indeed effectual in the short-term memory competition but fails to equip students with the ability to solve problems in life.

Based on observations at MTsN 6 of Tulungagung, students played an active role in the learning process. However, not all students were active. Some students were doing their own business during the learning process such as chatting with their friends and not focusing on learning. The methods used by teachers also varied greatly such as talking sticks, mind mapping, and card. In such learning models, students become active and develop every day. Indeed, in terms of learning materials, Social Studies materials are monotonous and comprehensive; therefore a teacher must provide a variety of learning methods so that students do not easily get bored in the learning process. In addition, Social Studies materials are wide-ranging. In this case, students must have thinking skill (critical thinking and creative thinking) to deal with problems in doing assignments, improving learning outcomes, or even solving problems in the environment. The methods adopted by the teachers have yet to demonstrate thinking skill. Therefore, the researcher adopts thinking skill-based inquiry learning method in the learning process to improve the students' learning outcomes.

Studies about inquiry learning have been conducted by some researchers. Suyati et.al. (2018) conducted study on the application of inquiry learning to train critical thinking skills on light material in elementary school students. This study focused on determining the effectiveness of inquiry learning model in training the critical thinking skills for primary students. The result revealed that inquiry learning model is effective to train the critical thinking of elementary students. Then, Sandika and Fitrihidayah (2018) held a study focused on improving creative thinking skills and scientific attitude through inquiry based learning in basic biology lecture. The subjects of this study were students of biology education at IAIN Jember. This study proved that inquiry-based learning can enhance creative thinking and improve attitude in basic biology lecture. Next, a study aims to determine the effectiveness of inquiry learning designed module in improving students' critical thinking skills was also conducted by researcher (Susilowati, et.al, 2018). The subject selected on this study was from Public Islamic High School in Magetan Regency. The result showed that inquiry lesson based module were effective to improve students' critical thinking skills. In addition, Ghaemi and Javad (2017) conducted study on the impact of inquiry based learning on EFL students' critical thinking. The study focused on the English language learners at Guyesh language institute in Alborz, Iran. The result of this study confirmed that there was significant impact on critical thinking skills of students in participating the inquiry learning. According to the above studies, most previous research was only examined the effect of inquiry based learning in improving students' critical thinking. In biology course, English course and common, elementary school, high school, and institute course. In this study we focused on the inquiry based learning in social studies to improve students' critical thinking at grade VIII students of MTSN 6 Tulungagung. It is crucial to conduct this study as social studies were valuable to foster students potential in facing the challenges of the global life.

According to Brandt, thinking skill can create a high awareness among educators at schools to teach students about the rapid growth of the world which demands critical thinking response. Therefore, learning by applying critical thinking skill and being creative in the classroom are the most appropriate ways to answer this challenge. According to Savage and Armstrong, the initial stage of critical thinking is

bringing up new ideas or thoughts. This stage is also called the stage of creative thinking. At the second stage, students make judgments, assessments, or estimates based on criteria that can be accounted for. The second stage is categorized as a thinking stage in which students can process their brains to solve individual problems or problems around them. Based on the description above, this research aims at investigating the effect of thinking skill-based inquiry instruction approach on the pupils' learning outcomes of Social Studies. This research specifically concerns (1) the difference of instruction outcomes between the adoption of thinking skill-based inquiry method, and conventional learning method; (2) the significant effect of thinking skill-based inquiry learning method on the students' learning outcomes of Social Studies; and (3) the effect size of thinking skill-based inquiry instruction approach on the pupils' instruction reactions of Social Studies.

2. Methods

This research adopted a quantitative approach. This approach predominantly uses deductive-inductive reasoning. It is based on a theoretical framework, expert ideas, and the researchers' understanding regarding their experience. These components are then developed into problems. As a response to the problems, solutions are then proposed to obtain verification or rejection in the form of empirical data in the field. This study aims to examine whether thinking skill-based inquiry learning method affects the students' learning outcomes of Social Studies subject of grade VIII students at MTsN 6 Tulungagung. The type of research was experimental research, that is, a research method used to investigate the effect of certain treatment on others in a controlled condition. The design of experimental research in this study was Quasi-Experimental research. Quasi-Experimental design is a study that addresses actual tests where all relevant variables cannot be controlled or manipulated. There must be a compromise in determining internal validity in accordance with existing limitations. In this study, the researchers took two groups, namely the experimental group with the use of thinking skill-based inquiry method, and the control group with the use of the conventional method.

The population is closely related to elements of where information is obtained. The elements engage individuals, families, households, social groups, schools, classrooms, organizations, etc. The respondents or subject of research were total of the seventh grade (VIII), it was more or less 340 pupils at MTsN 6 Tulungagung. Regarding the sample of this study, two classes were selected namely class VIII H as the control group, and class VIII I as the experimental group. Theoretically, the sample is a part of the population selected by researchers to be observed. In general, a sample is a subset drawn from a population. Sampling is the process of selecting a number of individuals in a study in such a way that these individuals represent a larger group. The sampling technique in this study employed Nonprobability Sampling, particularly saturated sampling. Nonprobability sampling technique is a sampling technique that does not provide the same opportunity for each element or member of the population to be selected as the sample. It is in accordance with the objective of this study, that is, to investigate the effect of thinking skill-based inquiry learning method on learning outcomes of Social Studies.

In designing the instrument, researchers prepared an instrument grid. The instrument grid shows the link between the focus of the study and the data source from which the data were being collected, the method used, and the instruments designed.

Table 1: Instrument grid to measure learning outcomes

Basic Competence	Indicators	Test Level Numbers				Percentage
		C1	C2	C3	C4	
3.3 Analyzing the advantages and disadvantages of space in demand and supply, technology, and their effect on interactions amidst spaces for economic, social, and cultural activities both in Indonesia and	3.3.1 Explaining the differences between the maritime economy and ocean economy.	1 (I)	2 (I)	1 (II)		20%
	3.3.2 Explaining the maritime economic conditions of Indonesia and ASEAN countries	3 (I) 4 (I)	5 (I)		2 (II)	25%
	3.3.3 Determining differences between agricultural and non-agricultural	6 (I) 7 (I)	8 (I)		3 (II)	25%

ASEAN countries.	economics.					
	3.3.4 Explaining the role of Indonesian agriculture and efforts to advance it.	9 (I)	10 (1)	4 (II)		20%
4.3 Presenting an analysis of the advantages and disadvantages of space in demand and supply, technology, and their effect on interactions amidst spaces for economic, social, and cultural activities in Indonesia and ASEAN.	4.3.1 Communicating solutions to Indonesia's agricultural economic barriers.				5 (II)	10%
Percentage		30 %	20 %	20 %	30 %	100%

To find out whether the test items were reliable and consistently provided the same measurement results, a reliability test was performed. The data for the reliability test was obtained from the data of validity test. The test items are said to be reliable if $r_{count} \geq r_{table}$. The reliability test adopted SPSS 18.0 for Windows, using Cronbach Alpha formula. Table 2 depicts the result of validity test the t.

Table 2: Output of Reliability Test Using SPSS 18.0

Reliability Statistics	
Cronbach's Alpha	No of Items
.776	11

As depicted in Table 2, the Cronbach's Alpha showed that $r_{count} \geq r_{table}$, that is, $0,776 \geq 0,632$. Thus, the 15 test items were declared reliable.

A. Preliminary Research Test

1. Homogeneity Test

The goal of conducting a homogeneity test was to investigate whether the two groups in the study had the same variance. In this study, the researchers conducted a homogeneity test in class VIII-H and VIII-I. The data used to test the homogeneity of both classes was the midterm test scores of the odd semester. The homogeneity test adopted SPSS 18.0 for windows. Table 3 shows the result of the homogeneity test.

Table 3: Output of Homogeneity Test

Test of Homogeneity of Variances			
Value			
Levene Statistics	df1	df2	Sig.
6,166	1	70	.015

The data was homogeneous if the significance level > 0.05 . As depicted in Table 3, the significance value was 0.015. Since the significance value was > 0.05 , that is, 0.015, the data was homogeneous. Therefore, both classes were homogeneous.

B. Prerequisite Test of Hypothesis

1. Normality Test

The normality test was worn to settle even if the data were normally distributed. The normality test was a prerequisite for the t-test. In this case, the data used for the t-test must be normally dispersed. If the data was not normally dispersed, the t-test cannot proceed. A distribution is normal if the significance level > 0.05 , conversely if the level < 0.05 , it is not a normal distribution. The normality test employed the Kolmogorov-Smirnov test in SPSS 18.0 for Windows. In this study, the data was the students' daily test scores. Table 4 shows the result of the normality test of daily test scores.

Table 4: Output of Normality Test

One-Sample Kolmogorov-Smirnov Test			
		Control Group	Experimental Group
N		38	34
Normal Parameters ^{a,b}	Mean	80.34	81.18
	Std. Deviation	4,755	6,681
Most Extreme Differences	Absolute	.232	.276
	Positive	.157	.276
	Negative	-.232	-.229
Kolmogorov-Smirnov Z		1,431	1,608
Asymp. Sig. (2-tailed)		.033	.011
a. Test distribution is Normal.			
b. Calculated from data.			

Based on the output table of the normality test of daily test scores, it was obtained that the *Asymp. Sig.2 (tailed)* value of the control group was 0.033 ($0.033 > 0.05$). Thus, it can be said that the data of daily test scores were normally distributed.

C. Hypothesis Test

In measurement the research hypothesis, the t-test was adopted to investigate the effect of thinking skill-based inquiry learning approach on the students' learning outcomes of Social Studies subject.

1. T-test

After the data of learning outcomes was normal and obtained from the homogeneous classes, the researcher tested the hypothesis by employing the t-test. T-test functioned to test the important of difference from two distributions. T-test was employed to investigate the effect of thinking skill-based inquiry learning approach on the students' learning outcomes of Social Studies subject. The hypothesis was proposed as follows.

H_0 : There is no effect of thinking skill-based inquiry learning method on the students' learning outcomes of Social Studies subject.

H_a : There is an effect of thinking skill-based inquiry learning method on the students' learning outcomes of Social Studies subject.

The followings were the criteria of the t-test

- If Sig. (*2-tailed*) < 0.05 and Sig. >0.05 H_a was accepted and H_0 was rejected.
- If Sig. (*2-tailed*) > 0.05 and Sig < 0.05 , H_0 was accepted and H_a was rejected.

Table 5 demonstrates the result of t-test using SPSS 16.0 for windows.

Table 5: Output of the t-test of the Posttest

Group Statistics					
	Kelas	N	Mean	Std. Deviation	Std. Error
Value	Control	38	68.82	9,185	1,490
	Experimental	34	80.91	5,859	1,005

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
Value	Equal variances assumed	F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
	Equal variances assumed	11,891	.001	-6,573	70	.000	-12,096	1,840	-15,766	-8,425
	Equal variances not assumed			-6,731	63,563	.000	-12,096	1,797	-15,687	-8,505

As demonstrated in Table 5, Sig. (2-tailed) = 0.000. Since the value of Sig. (2-tailed) was less than the significance level of 0.05, that is, $0.000 < 0.05$, H_a was accepted and thus it can be said that there was a difference of the test results between the experimental group and control group. This result indicated that there was an effect of thinking skill-based inquiry learning method on the students' learning outcomes of Social Studies subject. The steps in conducting the t-test can be seen in the appendix.

Once the effect had been identified, the effect size was then investigated by using effect size calculation. Effect size calculation on the t-test was performed by using the following formula:

$$d = \frac{\bar{X}_t - \bar{X}_c}{S_{pooled}}$$

Details:

d = Cohen's effect size

\bar{X}_t = the average of the experimental group

\bar{X}_c = the average of the control group

S_{pooled} = deviation standard

Previously, the value of S_{pooled} (S_{gab}) must be identified as follows:

$$\begin{aligned}
 s_{pooled} &= \sqrt{\frac{(n_1-1)S_1^2 + (n_2-1)S_2^2}{n_1+n_2-2}} \\
 &= \sqrt{\frac{(34-1)80,91 + (38-1)68,82}{34+38}} \\
 \text{Hence, } &= \sqrt{\frac{2670,03 + 2546,38}{72}} \\
 &= \sqrt{\frac{5216,37}{72}} = 72,44 = 8.51
 \end{aligned}$$

$$\begin{aligned}
 d &= \frac{\bar{X}_t - \bar{X}_c}{S_{pooled}} \\
 &= \frac{80,91 - 68,82}{8,51} = \frac{12,09}{8,51} = 1,42
 \end{aligned}$$

Referring to Cohen's table, the effect of thinking skill-based inquiry learning method on the students' learning outcomes of Social Studies was 91.9% and classified into the high category.

3. Results and Discussion

3.1. The Students' Learning outcomes of Social Studies

This study purpose to investigate the learning outcomes of Social Studies subject of grade VIII students due to the implementation of thinking skill-based inquiry learning method and conventional method. The posttest data showed that the average of learning outcomes of Social Studies subject was 80.91 for the experimental group, and 68.82 for the control group. To compare, the Minimum Completion Criteria (KKM) of Social Studies subject was 75. Referring to the minimum score, the average of the experimental group exceeded 75. It indicated that Maritime Economics Reinforcement and Indonesian Agriculture materials were comprehended by the students. Meanwhile, the average score of 68.82 obtained by the control group did not reach the minimum score. Therefore, it can be said that the students did not grasp the materials well. Table 6 shows the scoring guide.

Table 6. Scoring Guide

Numeric Value	Letter Value	Details
80-100	A	Very Good
70-79	B	Good
60-69	C	Fair
50-59	D	Poor
40-49	E	Failed

Based on the scoring guide over, the average result of the experimental group, 80.91, was a very good score. Meanwhile, the control group's average score, 68.82, was a fair score. The average score of the experimental group was better than that of the control group. In other words, the experimental group's learning outcomes was higher than that of the control group ($80.91 > 68.82$). The foremost factor that affected the learning outcomes was due to the different teaching methods. As previously explained, the experimental group learned the materials by adopting thinking skill-based inquiry method, whereas the control group employed a conventional method.

The implementation of thinking skill-based inquiry learning method in the experimental group began with recalling previous materials about Maritime Economics Reinforcement and Indonesian Agriculture. The teacher then explained the materials briefly. After that, the teacher provided problems concerning the materials that must be resolved by the students. In this situation, the teacher's role was to guide the students in understanding the problems, designing a resolution plan, and resolving the problems.

Once the students had grasped the way to resolve the problems, the teacher then administered the posttest to the students. The posttest consisted of 10 multiple choice questions and 5 essay questions to figure out the students' learning outcomes. To clarify, the test was declared valid and reliable.

In addition, the learning process also matched with the Graduate Competency Standard of Educational Unit (SKL-KP) No. 23 of 2006 for Junior High School that stated, "The students must be teachers' guidance." Thinking skill-based inquiry learning method meets the criteria of SKL- KP as it teaches students the basics of scientific thinking. According to Brandt, currently, there has not been much high awareness among educators in schools to teach students about the condition of the developing world that demands responses with critical and creative thinking.²³ Therefore, the application of thinking skill-based inquiry learning method is the right way to solve the occurring problems and improve the students' learning outcomes. Those situations were not achieved in conventional learning method as the students were passive when learning. Besides, the learning process was a one-way interaction, meaning that teachers deliver materials, and students receive the materials. As a result, the students' understanding only comes from what is delivered by teachers, and this condition surely affects learning outcomes.

Suprpto argued that thinking skill-based inquiry learning method is an individual ability to use their thinking process to create novel, constructive, and good ideas based on rational concepts, perception, and individual intuition. The existing theories lead researchers in finding novel

information regarding thinking skill; for example, the emergence of critical and creative thinking skills that facilitate students to resolve any problems. The skills positively affect students' learning outcomes.²⁴

As what has elaborated overhead, it can be said that thinking skill-based inquiry learning approach positively affected the students' learning outcomes of Maritime Economics Reinforcement and Indonesian Agriculture materials.

3.2. Effect of Thinking Skill-based Inquiry Learning Method on the Students' Learning Outcomes

This research was conducted to investigate whether thinking skill-based inquiry learning method affected the students' learning outcomes. Using a quasi-experimental design, this study selected two classes as the sample. In the preliminary study, the researchers converged the data of the pupil's final result of Social Studies in the odd semester. Referring to the analysis of the preliminary data, the classes were homogeneous. It indicated that the sample came from the same condition, that is, having the same level of knowledge. Besides, both classes had a similar average score. This research was carried out in 4 meetings in either the experimental group or the control group.

Once the treatment had been administered to both groups, the students of either the experimental group or control group did the posttest with the same number of questions. This aimed at obtaining the data of the students' learning outcomes that would be further analyzed to draw a conclusion.

Rubinstein and Firstenberg said that by thinking imaginatively and rationally, we are able to develop a capacity to understand new patterns and principles, unite diverse phenomena, and simplify complex situations. This is the nature of having creative and productive thinking, enabling someone to resolve any problems. The ability resulted from possessing creative thinking and critical thinking is that students are able to resolve any problems. This ability had a positive effect on students' learning outcomes.

Referring to the data analysis, it showed that the different significance existed between t_{count} and t_{table} calculated by using the t-test, and it was obtained that $t_{count} > t_{\alpha}$, ($6.573 > 1.658$); thus, H_a was accepted. As H_a was accepted, there was a difference between the implementation of thinking skill-based inquiry learning method and the conventional method. The difference was evident in the average score obtained by the two

groups. The experimental group gained 80.91, whereas the control group only gained 68.82. By this evidence, it can be closed out that there was an outcome of thinking skill-based inquiry learning method on the students' learning outcomes. In other words, the method positively affected the students' learning outcomes of Social Studies.

3.3. The Effect Size of Thinking Skill-based Inquiry Learning Approach on the Students' Learning Outcomes.

The effect size of thinking skill-based inquiry learning method on learning outcomes was analyzed by using *effect size* calculation. To calculate the effect size, this research adopted Cohen's formula, resulting in a percentage of 91.9%. This result indicated that the effect size was high. The obtained effect size also suggested that thinking skill-based inquiry learning method enhanced the students' learning outcomes.

The enhanced instruction reaction was clear evidence that the inquiry method was effectual. Simply say, thinking skill-based inquiry learning method greatly affected the learning process of Social Studies. The method was able to boost the students' motivation and affect learning outcomes, which was evident in the average scores of both groups, that is, 80.91 for the experimental group, and 68.82 for the control group.

The high average score of the experimental group, compared to the control group, was due to the difference in the learning method. The experimental class, taught by using thinking skill-based inquiry learning method, was more active and motivated to discover problem resolutions.

According to Brandt, thinking skill can create a high awareness among educators at schools to teach students about the rapidly growing condition of the world which demands critical thinking response. Therefore, learning by applying critical thinking skill and being creative in the classroom is the most appropriate way to answer this challenge.²⁵ According to Savage and Armstrong, the initial stage of critical thinking is bringing up new ideas or thoughts. This stage is also called the stage of creative thinking. At the second stage, students make judgments, assessments, or estimates based on criteria that can be accounted for. The second stage is categorized as a thinking stage in which students can process their brains to solve individual problems or problems around them.

The method also enabled the students to enlarge their conceptual knowledge more deeply and comprehensively. Therefore, the correct conceptual understanding affected the way how the students did the test, and thus it resulted in better learning outcomes as seen in the posttest result. Meanwhile, the adoption of the conventional method in the control group made the students passive, unmotivated, and less focused on the materials.

The findings of this study suggested that thinking skill-based inquiry learning method outperformed the conventional method. The possible explanation of the findings was the interpretation value that reached 91.9%. Thinking the skill-based inquiry method demands the pupils to be alive, courageous, and motivated in discovering a problem resolution. The discovery process was equipped with some pictures provided by the teacher. In Social Studies subject, creativity and courage will lead the students to master the materials faster. Thinking skill-based inquiry learning method was found effective to enhance the students' understanding of the concept as well as learning outcomes, particularly in Social Studies subject.

The findings of this research are comparable to Setyani (2014) studying the effect of critical thinking skill and creativity on the students' performance in Accountancy. Setyani (2014) found that critical thinking skill positively affected the students' achievement. The result of the t-test showed that $t_{count} > t_{table}$ ($3.381 > 2.00$), and the significance value of $0.002 < 0.05$. Besides, the relative contribution was 57% and the effective contribution was 19.8%. In addition, creativity also positively affected the students' learning achievement. In this context, the t-test showed that $t_{count} > t_{table}$ ($2.207 > 2.000$); the significance value was < 0.05 ($0.009 > 0.05$); the relative contribution was 43%; and the effective contribution was 15%. Finally, critical thinking skill and creativity had a positive effect on the students' learning achievement in Accountancy subject. It was evident in the result of F test, displaying the value of $F_{count} > F_{table}$ ($16.782 > 3.150$), and the significance value of 0.0004 ($0.0004 < 0.05$). The determination coefficient (R^2) of 0.348 indicated that the effect size of critical thinking skill and creativity on the students' achievement was 34.8%. It means that the remaining 65.2% was influenced by other variables. Once the effect had been identified, the impact size turned into calculated in the form of a percentage. The percentage changed into obtained from the contrast among the difference of the experimental organization and control organization, and the common score of the control group. The end result showed that the impact size changed into 91.9%.

4. Conclusions

Referring to either theoretical or empirical discussion, the findings appear to suggest that the students' learning outcomes of the experimental group were better than that of the control group (80.91 > 68.82). It indicated that thinking skill-based inquiry learning method affected the students' learning outcomes. The effect was evident in the value of $t_{count} > t_{table}$.

The result of the t-test was 6.573, with the 5% significance level of 1.658. Therefore, H_a was accepted. It indicated there has been an impact of thinking skill-based inquiry learning technique on the students' learning outcomes. Ultimately, the impact size of wondering skill-based inquiry getting to know approach on the students' getting to know results of Social Studies difficulty becomes 91.9%. The results of this study can be used by teachers to improve the thinking skill-of inquiry of students. As a result of positive outcomes that caused, so the teachers should applying this learning technique to get the results are more satisfying.

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