CHAPTER IV

RESEARCH FINDINGS AND DISCUSSION

In this chapter, the researcher presents the finding of the research. It presents some discussions deal with the collected data of students' pre-test and post-test score from experimental and control group. This chapter covers the description of data, hypothesis testing, and discussion.

A. Research Findings

In this sub chapter the researcher presented the descriptive statistic of the research. The result of the students' writing procedure text on pre-test and post-test. It was given to IX A as experimental group that consisted of 24 students and IX B as control group that consisted of 25 students. The students who were taught by using think-talk-write strategy as exsperimental class and the students who were taught by using conventional strategy as control class.

The purpose of this research was to know the effectiveness of Think-Talk-Write strategy toward students' ability in writing procedure text at 9th students of MTs Fathul Hidayah Pangean Lamongan. The data were collected from students' score in pre-test and post-test of the two classes. Then, to determine the significance different score whether Think-Talk-Write strategy was effective or not, the researcher did not use individual scores for comparison. But, it used the results of class scores or mean of the scores in writing procedure text. To know the students' achievement was good or not, the researcher used the criteria that adopted from Azzahra (2017). The scores' criteria as follows:

Table 4.1 The Scores' Criteria

NO	Criteria	Range of Score
1.	Excellent	81 – 100
2.	Good	61 – 80
3.	Average	41 – 60
4.	Poor	21 – 40
5.	Very Poor	1 – 20

The scores were divided into five criteria. They were excellent, good, average, por, very poor. The students categorized into excellent score if they got 81-100 score which meant that they were able to do the test very well. The students categorized into good score if they got 61-80 score which meant that they had a little doubt. In this category, they were able to do the test well. The students categorized into average score if they got 41- 60 score which meant that they were able to do test pretty well. The students categorized into poor score if they got 21-40 score which meant that they just did the test. The last criterion were the students categorized into very poor score if they got 1-20 score which meant that they could not do the test well. Then, the students' score in pre-test and post-test were presented as follows:

1. The Students' Scores of Control Class

a. Pre-Test of Control Class

Control group is a class which was not taught by using think-talk-write strategy. The teaching and learning activity was done by the researcher as usual or using conventional strategy. Before the researcher conduct teaching learning process, the researcher administered a pretest for the control group.

Table 4.2 The Students' Scores of Pre-Test

NO	SUBJECT	PRE-TEST SCORE
1.	AK	50
2	ARDS	60
3.	AK	41
4.	AM	53
5.	ANR	42
6.	ANH	48
7.	AAA	52
8.	AAR	48
9.	ANA	46
10.	ERN	49
11.	EDP	64
12.	FA	50
13.	FAF	41
14.	KR	62

15.	LA	43
16.	MANA	50
17.	MRAK	50
18.	MS	55
19.	MAZ	48
20.	MS	42
21.	MIM	50
22.	MLHT	56
23.	MFS	51
24.	NF	61
25.	TDW	53

The pre-test followed by 25 students of control class (IX B Class). The researcher allocated the time about 30 minutes for conducting pre-test. The pre-test was in the form of writing instruction that the students must write procedure text, they must use the topic that was given by the teacher. The test was intended to know the students' ability in writing procedure text before the teacher teach them by using conventional strategy. The pre-test was held on Monday, 20th of January 2020.

The researcher used SPSS 16.0 version to know the descriptive statistic and the precentage of students' score of pre test. The precentage was divided into five criteria: excellent, good, average, poor, and very poor (see table 4.1). The result of calculation as follow:

Table 4.3 Descriptive Statistic of Pre-Test

Statistics

PRETEST

N	Valid	25
	Missing	0
Mean		50.60
Std. Error of Mean		1.294
Median		50.00
Mode		50
Std. Deviation		6.468
Variance		41.833
Range		23
Minimum		41
Maximum		64
Sum		1265

Based on the table 4.2, it showed that there were 25 students of control class. It showed the mean score of pre-test was 50.60. Then, the half number of data sample which determined as median score from pre-test was 50.00. To know the most frequently appeared number, the data used mode score and the most appeared number was 50. The standard deviation of pre-test was 6.468. The range of pre-test was 23. In addition, the minimum score was 41. The maximum score was 64. The sum of pre-test was 1265. Then, the number of score appeared in pre-test, the researcher presents frequency distribution as follow:

Table 4.4 Frequency Distribution of Score in Pre-Test

PRETEST

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	41	2	8.0	8.0	8.0
	42	2	8.0	8.0	16.0
	43	1	4.0	4.0	20.0
	46	1	4.0	4.0	24.0
	48	3	12.0	12.0	36.0
	49	1	4.0	4.0	40.0
	50	5	20.0	20.0	60.0
	51	1	4.0	4.0	64.0
	52	1	4.0	4.0	68.0
	53	2	8.0	8.0	76.0
	55	1	4.0	4.0	80.0
	56	1	4.0	4.0	84.0
	60	1	4.0	4.0	88.0
	61	1	4.0	4.0	92.0
	62	1	4.0	4.0	96.0
	64	1	4.0	4.0	100.0
	Total	25	100.0	100.0	

Based on the table 4.3, it showed the scores that describe the categorizing based on frequency distribution by considering on qualification of the scoring rubric.

a. There were 22 students who got score between 41-60, it means that the students' ability in writing procedure text was average.

b. There were 3 students who got score between 61-80, it means that the students' ability in writing procedure text was good.

b. Post-Test of Control Class

Administering a post-test in writing procedure text for control group was done to know the improvement of students' ability in writing procedure text although the teaching learning process was without using think-talk-write strategy.

Table 4.5 The Students' Scores of Post-Test

NO	SUBJECT	PRE-TEST SCORE
1.	AK	71
2	ARDS	64
3.	AK	61
4.	AM	67
5.	ANR	58
6.	ANH	60
7.	AAA	67
8.	AAR	65
9.	ANA	61
10.	ERN	66
11.	EDP	78
12.	FA	72
13.	FAF	73
14.	KR	73

15.	LA	64
16.	MANA	68
17.	MRAK	67
18.	MS	64
19.	MAZ	70
20.	MS	71
21.	MIM	65
22.	MLHT	69
23.	MFS	61
24.	NF	66
25.	TDW	67

The post-test followed by 25 students of control class (IX B Class). The researcher allocated the time about 30 minutes for conducting post-test. The post-test was in the form of writing instruction that the students must write procedure text, they must use the topic that was given by the teacher. The test was intended to know the students' ability in writing procedure text after the teacher teach them by using conventional strategy. The post-test was held on Tuesday, 28th of January 2020.

The researcher used SPSS 16.0 version to know the descriptive statistic and the precentage of students' score of post-test. The precentage was divided into five criteria: excellent, good, average, poor, and very poor (see table 4.1). The result of calculation as follow:

Table 4.6 Descriptive Statistic of Post-Test

Statistics

POSTTEST

N	Valid	25
	Missing	0
Mean		66.72
Std. Error of Mean		.946
Median		67.00
Mode		67
Std. Deviation		4.730
Variance		22.377
Range		20
Minimum		58
Maximum		78
Sum		1668

Based on the table 4.5, it showed that there were 25 students of control class. It showed the mean score of post-test was 66.72. Then, the half number of data sample which determined as median score from pre-test was 67.00. To know the most frequently appeared number, the data used mode score and the most appeared number was 67. The standard deviation of post-test was 4.730. The range of pre-test was 20. In addition, the minimum score was 58. The maximum score was 78. The sum of pre-test was 1668. Then, the number of score appeared in pre-test, the researcher presents frequency distribution as follow:

Table 4.7 Frequency Distribution of Score in Post-Test

POSTTEST

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	58	1	4.0	4.0	4.0
	60	1	4.0	4.0	8.0
	61	3	12.0	12.0	20.0
	64	3	12.0	12.0	32.0
	65	2	8.0	8.0	40.0
	66	2	8.0	8.0	48.0
	67	4	16.0	16.0	64.0
	68	1	4.0	4.0	68.0
	69	1	4.0	4.0	72.0
	70	1	4.0	4.0	76.0
	71	2	8.0	8.0	84.0
	72	1	4.0	4.0	88.0
	73	2	8.0	8.0	96.0
	78	1	4.0	4.0	100.0
	Total	25	100.0	100.0	

Based on the table 4.6, it showed the scores that describe the categorizing based on frequency distribution by considering on qualification of the scoring rubric.

a. There were 3 students who got score between 41-60, it means that the students' ability in writing procedure text was average.

b. There were 22 students who got score between 61-80, it means that the students' ability in writing procedure text was good.

2. The Students' Scores of Experimental Class

a. Pre-Test of Experimental Group

Experimental group is a class which was given a treatment in writing procedure text by using Think-Talk-Write strategy. Before the researcher gave the treatment, the researcher administered a pre-test of writing procedure text for the experimental group.

Table 4.8 The Students' Scores of Pre-Test

NO	SUBJECT	PRE-TEST SCORE
1.	AHAB	42
2	ABE	41
3.	AARA	52
4.	AAA	53
5.	AZN	63
6.	AP	58
7.	CF	40
8.	ECW	61
9.	FB	47
10.	FIM	49
11.	MHS	49
12.	MAAW	53
13.	MLH	42
14.	NUHR	53
15.	NN	53

16.	NAF	55
17.	RA	60
18.	RTA	47
19.	SQ	53
20.	SNAI	49
21.	SNHS	62
22.	SR	56
23.	UMS	62
24.	ZWI	42

The pre-test followed by 24 students of experimental group (IX A Class). The researcher allocated the time about 30 minutes for conducting pre-test. The pre-test was in the form of writing instruction that the students must write procedure text, they must use the topic that was given by the teacher. It was done before treatment process using think-talk-write strategy. The test was intended to know the students' ability in writing procedure text before the students get the treatment. The pre-test was held on Tuesday, 21st of January 2020.

The researcher used SPSS 16.0 version to know the descriptive statistic and the precentage of students' score of pre test. The precentage was divided into five criteria: excellent, good, average, poor, and very poor (see table 4.1). The result of calculation as follow:

Table 4.9 Descriptive Statistic of Pre-Test

Statistics

PRETEST

N	Valid	24
	Missing	0
Mean		51.75
Std. Error of Mean		1.457
Median		53.00
Mode		53
Std. Deviation		7.140
Variance		50.978
Range		23
Minimum		40
Maximum		63
Sum		1242

Based on the table 4.8, it showed that there were 24 students of experimental group. It showed the mean score of pre-test was 51.75. Then, the half number of data sample which determined as median score from pre-test was 53.00. To know the most frequently appeared number, the data used mode score and the most appeared number was 53. The standard deviation of pre-test was 7.140. The range of pre-test was 23. In addition, the minimum score was 40. The maximum score was 63. The sum of pre-test was 1242. Then, the number of score appeared in pre-test, the researcher presents frequency distribution as follow:

Table 4.10 Frequency Distribution of Score in Pre-Test

PRETEST

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	40	1	4.2	4.2	4.2
	41	1	4.2	4.2	8.3
	42	3	12.5	12.5	20.8
	47	2	8.3	8.3	29.2
	49	3	12.5	12.5	41.7
	52	1	4.2	4.2	45.8
	53	5	20.8	20.8	66.7
	55	1	4.2	4.2	70.8
	56	1	4.2	4.2	75.0
	58	1	4.2	4.2	79.2
	60	1	4.2	4.2	83.3
	61	1	4.2	4.2	87.5
	62	2	8.3	8.3	95.8
	63	1	4.2	4.2	100.0
	Total	24	100.0	100.0	

Based on the table 4.9, it showed the scores that describe the categorizing based on frequency distribution by considering on qualification of the scoring rubric.

a. There were 20 students who got score between 41-60, it means that the students' ability in writing procedure text was average.

b. There were 4 students who got score between 61-80, it means that the students' ability in writing procedure text was good.

b. Post-Test of Experimental Class

Administering a post-test in writing procedure text for experimental group was done to know the improvement of students' ability in writing procedure after got the treatment by using Think-Talk-Write strategy.

Table 4.11 The Students' Scores of Post-Test

NO	SUBJECT	POST-TEST SCORE
1.	AHAB	77
2	ABE	73
3.	AARA	65
4.	AAA	73
5.	AZN	80
6.	AP	77
7.	CF	74
8.	ECW	90
9.	FB	75
10.	FIM	74
11.	MHS	82
12.	MAAW	81
13.	MLH	75
14.	NUHR	81
15.	NN	83
16.	NAF	74

17.	RA	68
18.	RTA	86
19.	SQ	79
20.	SNAI	73
21.	SNHS	84
22.	SR	79
23.	UMS	68
24.	ZWI	84

The post-test followed by 24 students of control group (IX A Class). The researcher allocated the time about 30 minutes for conducting post-test. The post-test was in the form of writing instruction that the students must write procedure text, they must use the topic that was given by the teacher. It was done after treatment process by using think-talk-write strategy. The test was intended to know the students' ability in writing procedure text after the students get the treatment process by using Think-Talk-Write strategy. The post-test was held on Wednesday, 29th of January 2020.

The researcher used SPSS 16.0 version to know the descriptive statistic and the precentage of students' score of post-test. The precentage was divided into five criterioa: excellent, good, average, poor, and very poor (see table 4.1). The result of calculation as follow:

Table 4.12 Descriptive Statistic of Post-Test

Statistics

POSTTEST

N	Valid	24
	Missing	0
Mean		77.29
Std. Error of Mean		1.237
Median		77.00
Mode		73[a]
Std. Deviation		6.061
Variance		36.737
Range		25
Minimum		65
Maximum		90
Sum		1855

a. Multiple modes exist. The smallest value is shown

Based on the table 4.11, it showed that there were 24 students of experimental group (IX A Class). It showed the mean score of post-test was 77.29. Then, the half number of data sample which determined as median score from pre-test was 77.00. To know the most frequently appeared number, the data used mode score and the most appeared number was 73. The standard deviation of post-test was 6.061. The range of post-test was 25. In addition, the minimum score was 58. The maximum score was 78. The sum of post-test was 1855. Then, the number of score appeared in post-test, the researcher presents frequency distribution as follow:

Table 4.13 Frequency Distribution of Score in Post-Test

POSTTEST

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	65	1	4.2	4.2	4.2
	68	2	8.3	8.3	12.5
	73	3	12.5	12.5	25.0
	74	3	12.5	12.5	37.5
	75	2	8.3	8.3	45.8
	77	2	8.3	8.3	54.2
	79	2	8.3	8.3	62.5
	80	1	4.2	4.2	66.7
	81	2	8.3	8.3	75.0
	82	1	4.2	4.2	79.2
	83	1	4.2	4.2	83.3
	84	2	8.3	8.3	91.7
	86	1	4.2	4.2	95.8
	90	1	4.2	4.2	100.0
	Total	24	100.0	100.0	

Based on the table 4.12, it showed the scores that describe the categorizing based on frequency distribution by considering on qualification of the scoring rubric.

a. There were 16 students who got score between 61-80, it means that the students' ability in writing procedure text was good.

b. There were 8 students who got score between 81-100, it means that the students' ability in writing procedure text was excellent.

B. Data Analysis

1. Comparison of Statistical Data in Post-test of Control Group and Experimental Group.

The researcher compared students' score of post-test of both groups (control and experimental) that consisted of the highest score, the lowest score and the mean score in writing procedure text. After that, the researcher found out the score of each group from students score in post-test to know whether the student was getting down, same or different. The result of difference of statistical data in post-test of control group and experimental group can be seen in the table as follow;

Table 4.14 Descriptive Statistic of Post-Test Control and Experimental Group

Statistics

		EXP	CON
N	Valid	24	25
	Missing	0	0
Mean		77.29	66.72
Median		77.00	67.00
Mode		73[a]	67
Minimum		65	58
Maximum		90	78

Based on the table 4.13, it can be seen the difference of the students score in post-test of control and experimental group in writing procedure text. In post-test of control group showed that the highest score

was 78, the lowest score was 58 and the mean score was 66.72, while in post-test of experimental group showed that the highest score was 90, the lowest score was 78 and the mean score was 77.29.

Those results showed that the experimental group who were taught writing procedure text by using Think-Talk-Write strategy was higher than the control group who were taught writing procedure text without using Think-Talk-Write strategy. From those results, it can be concluded that there was significant difference score on students' ability in writing procedure text between students taught by using Think-Talk-Write strategy and those taught by using conventional strategy. In other word, the using of Think-Talk-Write strategy in teaching writing procedure text was effective to teaching writing for the students at 9^{th} grade students of MTs Fathul Hidayah Pangean Lamongan.

C. Hypothesis Testing

According to Cresswell (2012:188), hypothesis testing is a procedure for making decisions about results by comparing an observed value of a sample with a population value to determine if no difference or relationship exists between the values. The hypotheses testing of this research were as follows:

1. If the ρ-value (significance value) is less than or equal to 0.05 ($\alpha = 5\%$), then the null hypothesis (H_0) is rejected and the alternative hypothesis (H_a) is accepted. It means there is significant different score in writing

procedure text between the students who are taught and those who are not taught by using Think-Talk-Write strategy.

2. If the ρ-value (significance value) is greater than to 0.05 (α = 5%), then the null hypothesis (H_0) is accepted and the alternative hypothesis (H_a) is rejected. It means there is no any significant different score in writing procedure text between the students who are taught and those who are not taught by using Think-Talk-Write strategy.

Therefore, to investigate whether Think-Talk-Write strategy gave effect on students' ability in writing procedure text. The researcher tested the result of post-test by using Independent Samples T-Test in SPSS 16.0 program. These subjects were referred to as independent because they were independently from the different subject. The result as follow:

Table 4.15 Group Statistics of Two Groups

Group Statistics

	KELAS	N	Mean	Std. Deviation	Std. Error Mean
POSTEST	EXPERIMENTAL	24	77.29	6.061	1.237
	CONTROL	25	66.72	4.730	.946

Referring to Table 4.14 it showed that the students' score who were taught by using Think-Talk-Write strategy as experimental group and the students' score who were taught without Think-Talk-Write strategy as control group. The result showed that the member of students (N) in the experimental group was 24 students and the member of students in the control group was 25 students. The mean of the

experimental group was 77.29 while the control group was 66.72. Standard deviation of experimental group was 6.061 and the control group was 4.730. Then the standard error mean of experimental group was 1.237 and the control group was 0.946

Table 4.16 The Result of Analyzing Independent Sample T Test

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
POSTTEST	Equal variances assumed	1.897	.175	6.822	47	.000	10.572	1.550	7.454	13.689
	Equal variances not assumed			6.788	43.506	.000	10.572	1.557	7.432	13.712

Referring to Table 4.15, it showed that in Levene's Test for Equality of Variances, it seen that F= 1.897 (p=0,175) because of p higher than 0.05, it indicated that there is no difference in variance data or in the other words data was equal or homogenous. If the data was homogeneous, see on the result of *Equal Variances Assumed*. As can be seen in table 4.15, it showed that Df (Degree of freedom) was 47. Therefore, the way to test whether the null hypothesis can be rejected was by comparing p-value with the standard level of significance (0.05). According to

Balnaves & Calputi (2001), the convention to reject the null hypothesis was when the p-value of the obtained statistics was less than or equal to 0.05. As table 4.15 showed, the gained of significance value (p-value) was 0.000, and it has to be divided into two since we have one-tailed test (0.000 : 2 = 0.000). The result of SPSS the significance value < 0.05 (0.000 < 0.05), it was less than 0.05 (α = 5%). Thus, there was significant different score in writing procedure text between the students taught by using and without using Think-Talk-Write strategy. In short, the null hypothesis was rejected or it means that the alternative hypothesis was accepted.

D. Discussion

Based on the research findings, it can be said that the students who were taught by using Think-Talk-Write strategy made significant improvement in score. It can be seen from the mean score of pre-test was 50.60 and the average score of post-test was 66.72. The gain of the mean score in control class between pretest and posttest was 16.12. Whereas in the pre-test of experimental group the average score was 51.75 and the average score in post-test was 77.29. The gain of the mean score in experimental class between pretest and posttest was 25.54. It looked that the gain of mean score in experimental group higher than the gain of mean score in control group.

Related to the statistic calculation of Independent Samples T Test by using SPSS 16.00, the result of Sig. (2-tailed) showed that the significant value of

the group was 0.000, and it has to be divided into two since we have one-tailed test (0.000 : 2 = 0.000). The significance level was 0.05. Since 0.000 was smaller than significance level (α) 5% or 0.05, so the null hypothesis was rejected. Thus, there were significant different score in writing procedure text between the students who were taught using Think-Talk-Write Strategy and those who were not taught using Think-Talk-Write strategy.

The result of this research was also similar to the previous studies. The first was the research from Marfila (2018). From the result of her research, it showed that Think-Talk-Write strategy was effective in teaching writing descriptive text. The second was from Rofiqoh (2015). The result of her research showed that teaching writing recount text by using Think-Talk-Write strategy was effective to be used for improving the students' writing ability. The third was from Giska (2015). The result of her research showed that using Think-Talk-Write strategy could improve students' ability in writing descriptive text.

Furthermore, this research also confirmed some research theories from the experts. For the first was the theory of using Think-Talk-Write strategy could be an effective way to make students more easy how to organize their ideas. Huinker and Laughlin (1996) argued the Think-Talk-Write strategy builds in time for thought and reflection and for the organization of ideas and the testing of those ideas before students are expected to write. The flow of communication progresses from student engaging in thought or reflective

dialogue with themselves, to talking and sharing ideas with one another, to writing.

For the next, the Think-Talk-Write strategy made students were more active in the class or in groups because students can express their ideas, share opinions with their friends. Besides it can made students comfortable and more interested in following learning. This idea was in line with that of Hafrizon (2015: 67) that Think-Talk-Write strategy is a cooperative learning model of learning activities that started through the activities of thought (think), talk/discussion, exchanging ideas (talk) and write the results of the discussion (write) that the learning objectives and competencies expected to be achieved. Furthermore, this strategy can help students more easily understand the content with developing their idea through think, share ideas with their friends discussion and then applying it in writing.

Considering from those explanations, it can be conclude that Think-Talk-Write strategy was effective in teaching writing ability. Meanwhile, in this research the researcher used think-talk-write strategy to teaching writing especially in wrting procedure text. In other words, it can be said that Think-Talk-Write strategy was effective to be used in teaching writing of procedure text.