CHAPTER IV

RESEARCH RESULT AND DISCUSSIONS

This chapter presents the results and discussion of the research. It is divided into the data, they are calculation of trying-out instrument, pre-test, and post-test result. The researcher describes and analyses the result of the data. First is analysing the result of the trying-out instrument test. The second is analysing the result of pre-test, treatment activities, post-test, t-test statistical, and the last is discussion of the research findings.

4.1 Calculation of Trying Out Instrument

4.1.1 The Validity of Trying out Instrument

This research aimed to measure the instrument to be valid or not in improving the students' reading comprehension. This test was conducted on September 21, 2019 until Oktober, 3rd, 2019. It was conducted for VIII F has 24 students as respondent. The item test is valid if r_{xy} are greater than r_{table} or $r_{xy} > r_{table}$. The researcher consulted the table of r with df = n-2, df = 24 -2 = 22 and significant level 0,05 was 0,423.

Table 4.1

The validity of the Trying out Test

Criteria	Number of Item	The Total Number
Valid	1,2,5,7,8,9,10,12,13,14,15,16,18,20,21,22,23,25,27 28,30,33,34,36,39,40,45,47,49,50	30
Invalid	3,4,6,11,17,19,24,26,29,31,32,35,37,38,41,42,43,44 46,48.	20

Based on the table above can be seen that try-out instrument had 30 valid and invalid was 20 items. The complete result of try-out analysis can be seen in Appendix.

4.1.2 The Reliability of Trying out Test

After measuring the validity, the researcher calculated the reliability. This research was aimed to know the instrument was reliable or not. The researcher calculated the reliability by determining the odd and even of the questions number. The item test is reliable when r_{hitung}>r$_{table}$.

To calculated reliability of trying out instrument used SPSS calculation as follows:

Table 4.2

The Reliability Computation Using SPSS Calculation

Case Processing Summary

		N	%
Cases	Valid	24	100.0
	Excluded[a]	0	.0
	Total	24	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.768	50

From the SPSS calculation above, it showed that in Cronbach's Alpha column was 0,768. The result if Cronbach's alpha > r table.

If Cronbach's alpha > r table=Items not reliable

Based on the SPSS calculation above, it showed that in Cronbach's alpha colum was 0,768 and the r table 0,423 with the table significant 5%. The reliability could be said reliable if the Crobach's

Alpha > r table. In this part showed that 0,766 > 0,423. It meant that the instrument of the research was reliable.

4.2 Pre-test score

In this section, the data of the pre-test score of experimental class and control class is provided. Here are the descriptions:

Table 4.3

Pre-test Score of Experimental Class and Control Class

Experimental Class			Control Class		
No	Students	Score	No	Students	Score
1	AI-1	70	1	AI-1	75
2	AI-2	75	2	AI-2	70
3	AI-3	75	3	AI-3	70
4	AI-4	75	4	AI-4	65
5	AI-5	80	5	AI-5	70
6	AI-6	65	6	AI-6	55
7	AI-7	60	7	AI-7	60
8	AI-8	75	8	AI-8	75
9	AI-9	75	9	AI-9	75
10	AI-10	70	10	AI-10	65
11	AI-11	80	11	AI-11	75
12	AI-12	85	12	AI-12	75
13	AI-13	80	13	AI-13	70
14	AI-14	75	14	AI-14	60
15	AI-15	80	15	AI-15	75
16	AI-16	80	16	AI-16	80
17	AI-17	80	17	AI-17	85
18	AI-18	75	18	AI-18	70

19	AI-19	55	19	AI-19	55
20	AI-20	80	20	AI-20	80
21	AI-21	75	21	AI-21	75
22	AI-22	75	22	AI-22	65
23	AI-23	70	23	AI-23	70
24	AI-24	75	24	AI-24	70
∑		1785	∑		1685
Mean		74.37	Mean		70.20

Based on the table 4.1 it could be seen that in experimental class, the highest pre-test score was 85 while the lowest pre-test score was 55. On the other hand, in the control class, the highest score was 85 while the lowest pre-test score was 55. Therefore, in the experimental class, the average score or means was 74,37 On the other hand, in the control class, the average score or mean was 70,20.

From the students' pre-test score mean assumed that students from the experimental class performed be better than students from the control class in the pre-test. This assumption was tested by using t-test in the next section.

The T-test of Pre-test Score in the Experimental Group and control

Table 4.4

Group Statistics

	VAR00002	N	Mean	Std. Deviation	Std. Error Mean
EXPERIMENT	1.00	24	74.3750	6.80673	1.38942
	2.00	24	70.2083	7.58706	1.54870

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
EXPERIMENT	Equal variances assumed	.477	.493	2.003	46	.051	4.16667	2.08061	-.02139	8.35473
	Equal variances not assumed			2.003	45.469	.051	4.16667	2.08061	-.02271	8.35605

The table above described the t-test analysis using SPSS of pre-test in experimental and control group. There were two tables, first table was named "Group Statistic" presented the statistical results of pre-test in experimental and control group. The group statistic showed that the average between experimental and control group were different. The mean score of experimental group was 74.37 and the mean score of control group was 70,20, it meant that the experimental was the higher score then control group. It can be concluded that the experimental and control group had different understanding in reading comprehension.

The second table was named "Independent sample test" described the statistical of this research. The analysis showed that the difference was significant 0,51. It meant there was no significant the pre-test score of experimental group and control group. The significant level of 0,51 > 0,05. It indicates that the pre-test of experimental and control group was no significant in improving the students' reading comprehension.

In the independent sample test table also described about the value of this research. The result of t-value in this research was 2.003. Furthermore, the t-value was compared to the t-table to know whether through Number Heads Together the students can improve their reading comprehension or not. The t-table was taken from the requirement of t-table to analyse the data. The t-table of

0,05 as the significant level was 2,074 with 22 the degree of freedom(df). Then, it can be stated that t-value (2.003) of pre < t-table (2,074). It can be concluded that there was no significant between experimental and control group in improving the students' reading comprehension at the eighth grades of in MTs Darul Ulum Purwogondo in the academic year 2019/2020.

4.3 Post-test

In this section, the data of the post-test score of experimental class and control class is provided. The description as follows:

Table 4.5

Post-test Score of Experimental Class and Control Class

Experimental Class			Control Class		
No	Students	Score	No	Students	Score
1	AI-1	80	1	AI-1	75
2	AI-2	80	2	AI-2	65
3	AI-3	80	3	AI-3	60
4	AI-4	75	4	AI-4	65
5	AI-5	85	5	AI-5	70
6	AI-6	90	6	AI-6	85
7	AI-7	85	7	AI-7	75
8	AI-8	85	8	AI-8	75
9	AI-9	85	9	AI-9	80
10	AI-10	85	10	AI-10	85
11	AI-11	90	11	AI-11	85
12	AI-12	85	12	AI-12	75

13	AI-13	80	13	AI-13	65
14	AI-14	85	14	AI-14	80
15	AI-15	80	15	AI-15	75
16	AI-16	80	16	AI-16	75
17	AI-17	85	17	AI-17	80
18	AI-18	80	18	AI-18	70
19	AI-19	80	19	AI-19	85
20	AI-20	85	20	AI-20	85
21	AI-21	85	21	AI-21	75
22	AI-22	80	22	AI-22	75
23	AI-23	85	23	AI-23	70
24	A1-24	75	24	AI-24	60
∑		1985	∑		1790
Mean		82.70	Mean		74.58

According to table 4.2, in the experimental class, the highest pre-test got score was 90 while the lowest pre-test got score was 75. On the control class, the highest pre-test got score was 85 while the lowest pre-test got score was 60. Therefore, in the experimental class, the average score or mean was 82.70. On the other hand, in the control class, the average score or mean 74.58.

From the students' post-test score mean assumed that students from the experimental class performed be better than students from the control class in the post-test. This assumption was tested by using t-test in the next section.

The T-test of Post-test Score in the Experimental Group and control class.

Table 4.6
Group Statistics

	VAR00002	N	Mean	Std. Deviation	Std. Error Mean
EXPERIMENT	1.00	24	82.7083	3.89514	.79509
	2.00	24	74.5833	7.79028	1.59018

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means							
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
EXPERIMENT	Equal variances assumed	6.233	.016	4.570	46	.000	8.12500	1.77788	4.54631	11.70369
	Equal variances not assumed			4.570	33.824	.000	8.12500	1.77788	4.51122	11.73878

The table above described the t-test analysis using SPSS of post-test in experimental and control group. There were two tables, first table was named "Group Statistic" presented the

statistical results of post-test in experimental and control group. The group statistic showed that the average between experimental and control group were different. The mean score of experimental group was 82.70 and the mean score of control group was 74.58, it meant that the experimental was the higher score then control group. It can be concluded that the experimental and control group had different understanding in reading comprehension.

The second table was named "Independent sample test" described the statistical of this research. The analysis showed that the difference was significant was 0,00. It meant there was significant the pre-test score of experimental group and control group. The significant level of 0,00 < 0,05. It indicates that the post-test of experimental and control group was significant in improving the students' reading comprehension.

In the independent sample test table also described about the value of this research. The result of t-value in this research was 4.570. Furthermore, the t-value was compared to the t-table to know whether through Number Heads Together the students can improve their reading comprehension or not. The t-table was taken from the requirement of t-table to analyse the data. The t-table of 0,05 as the significant level was 2,074 with 22 the degree of freedom(df). Then, it can be stated that t-value (4.570) of post-test > t-table (2,074). It can be concluded that there was significant

between experimental and control group in improving the students'

reading comprehension at the eighth grades of in MTs Darul Ulum

in the academic year 22019/2020.

4.4 Testing of the Hypotheses

This research aimed to answer the problem statement of research

whether NHT technique has significant effective on students' ability in

reading narrative text on eighth grade students of MTs Darul Ulum Islamic

School Purwogondo. In order to provide for the question above, the

Alternative Hypothesis (Ha) and Null Hypothesis (Ho) were proposed as

follows:

a. Ho (Null Hypothesis): NHT Technique has no significant effectiveness in
   learning reading of narrative text.

b. Ha (Alternative Hypothesis): NHT technique has significance
   effectiveness in learning reading of narrative text.

To prove the hypothesis, the data obtained in experimental and

control group were calcuated by using t-test formula manual and SPSS.

Based on the discription of the data calculation, it shows that:

1. The t-value was 4,570

2. The degree of freedom (df) was 22, so the value of t-table was
   2,074 in significance level of 0,05.

It showed that the result of post-test both experimental and control

group was t-value (4,570) was higher than t-table (2,074). To conclude, the

t-value > t-table means that H0 (the Null hypothesis) was rejected and Ha (The Alternative hypothesis) was accepted. Moreover, the stating that "Number Head Together Technique is effective to improve the students' reading comprehension at the eight grade of Mts. Darul Ulum Purwogondo in the academic year 2019/2020".

4.5 Discussion

Based on the result of this research, this part discusses about the difference between effectiveness of NHT technique on the students' reading comprehension of narrative text and without NHT technique. The result of data pre-test and post-test happened in both classes, experimental group and control group. The experimental group which was taught through Number Head Together Technique and the control group which was taught without team NHT Technique.

The mean of pre-test in experimental group was 74,80, became 82,70 was mean score in post-test. Meanwhile, the mean score of the pre-test in control group was 70,20 and post-test was 74,58. It showed from the mean score of the post-test in the experimental group was higher than control group's post-test. In other side, the data analysis used t-test, the value t_o of pre-test in experimental and control group was 2,003 with the degree of freedom 22 in the level significance (α) of 0,05, t_{table} was 2,074 and the value t_o of post-test in experimental and control group was 4.570 with the degree of freedom 22 in the level significance (α) of 0,05, t_{table} was 2,074. It means that t_o was higher than t_{table} in post-test of experimental and control groups only. So, the Null hypothesis

(Ho) was rejected then alternative hypothesis was accepted that there was an effectiveness of Number Heads Together technique to improve the students' reading comprehension at eighth grades of MTs. Darul Ulum Purwogondo in the academic year of 2019/2020.