CHAPTER IV

RESEARCH FINDINGS AND DISCUSSION

In this chapter, the writer presents discussion about research findings, hypothesis testing and discussions of the research findings.

A. Research Findings

This part discusses an analysis of the ability of the seventh graders of MTs. Ma'arif Bakung in reading comprehension when they were taught using Question Answer Relationship strategy and when they were taught reading comprehension without using Question Answer Relationship strategy. The samples of this research are two classes. The data of this research were the pre-test scores and post-test scores of experimental group and control group. After getting the result of the pretest and posttest of experimental group, the researcher showed the data below:

Table 4.1
Descriptive analysis of pre-test in the experimental group

Statistics

pretest_eksp

N	Valid	47
	Missing	0
Mean		60.96
Median		60.00
Mode		55
Std. Deviation		8.382
Range		45
Minimum		35
Maximum		80
Sum		2865
Percentiles	25	55.00
	50	60.00
	75	65.00

Table 4.1 above, it showed that the mean 60.96, the median is 60, mode is 55, and the standard deviation is 8.382. The maximum score obtained is 80 and the minimum score is 35.

Table 4.2
Descriptive analysis of post-test in the experimental group

Statistics

posttest

N	Valid	47
	Missing	0
Mean		80.21
Median		80.00
Mode		75
Std. Deviation		8.782
Range		40
Minimum		60
Maximum		100
Sum		3770
Percentiles	25	75.00
	50	80.00
	75	85.00

Table 4.2 above, it showed that the mean 80.21 rounded is 80, the median is 80, mode is 75, and the standard deviation is 8.782. The maximum score obtained is 100 and the minimum score is 60.

Based on the table 4.1 and 4.2 above, shows that mean of pre-test in experimental group was 60.96 and in post-test improved to be 80.21. The median in the pre-test was 60.00 and 80.00 in the post-test. The mode in the pre-test was 55 and 75 in the post-test. The standard deviation in the pre-test was 8.382 and 8.782 in the post-test. The range in the pre-test was 45 and in the post-test was 40. The minimum score in the pre-test was 35 and 60 in the post-test. The maximum score in the pre-test was 80 and 100 in the post-test. The summary of pre-test was 2865 and in the post-test was 3770.

Table 4.3
Frequency of pretest score of Experimental group

pretest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	35	1	2.1	2.1	2.1
	50	2	4.3	4.3	6.4
	55	16	34.0	34.0	40.4
	60	10	21.3	21.3	61.7
	65	8	17.0	17.0	78.7
	70	6	12.8	12.8	91.5
	75	2	4.3	4.3	95.7
	80	2	4.3	4.3	100.0
	Total	47	100.0	100.0	

In the table 4.3, 1 student or 2,1% got 35, 2 students or 4,3% got 50, 16 students or 34% got 55, 10 students or 21,3% got 60, 8 students or 17% got 65, 6 students or 12,8% got 70, 2 students or 4,3% got 75, and 2 students or 4,3% got 80. This result considered that students only used their background knowledge without any input about reading comprehension before.

Table 4.4
Frequency of post test score of Experimental group

posttest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	60	1	2.1	2.1	2.1
	70	6	12.8	12.8	14.9
	75	15	31.9	31.9	46.8
	80	9	19.1	19.1	66.0
	85	7	14.9	14.9	80.9
	90	3	6.4	6.4	87.2
	95	4	8.5	8.5	95.7

| | | 100 | 2 | 4.3 | 4.3 | 100.0 |
| Total | | | 47 | 100.0 | 100.0 | |

In the table 4.4 above, after getting the treatment students got improved their results in the post-test. The researcher organized the percentage and frequency of the test can be seen in the table 4.4. 1 student or 2% got 60, 6 students or 12,8% got 70, 15 students or 31,9% got 75, 9 students or 19% got 80, 7 students or 14,9% got 85, 3 students or 6% got 90, 4 students or 8,5% got 95, and 2 students or 4,3% got 100.

Table 4.5
Descriptive analysis of pre-test in the control group

Statistics

pretest

N	Valid	45
	Missing	0
Mean		53.56
Median		55.00
Mode		50
Std. Deviation		6.625
Range		30
Minimum		40
Maximum		70
Sum		2410
Percentiles	25	50.00
	50	55.00
	75	55.00

Table 4.5 above, it showed that the mean 53.56, the median is 55, mode is 50, and the standard deviation is 6.625. The maximum score obtained is 70 and the minimum score is 40.

Table 4.6
Descriptive analysis of post-test in the control group

Statistics

posttest

N	Valid	45
	Missing	0
Mean		60.56
Median		60.00
Mode		55
Std. Deviation		7.247
Range		25
Minimum		50
Maximum		75
Sum		2725
Percentiles	25	55.00
	50	60.00
	75	65.00

Table 4.6 above, it showed that the mean 60.56, the median is 60, mode is 55, and the standard deviation is 7.247. The maximum score obtained is 75 and the minimum score is 50.

Based on the table 4.5 and 4.6 above, shows that mean of pre-test in control group was 53.56 and in post-test improved to be 60.56. The median in the pre-test was 55.00 and 60.00 in the post-test. The mode in the pre-test was 50 and 55 in the post-test. The standard deviation in the pre-test was 6.625 and 7.247 in the post-test. The range in the pre-test was 30 and in the post-test was 25. The minimum score in the pre-test was 40 and 50 in the post-test. The maximum score in the pre-test was 70 and 75 in the post-test. The summary of pre-test was 2410 and in the post-test was 2725.

Table 4.7
Frequency of pretest score of Control group

pretest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	40	3	6.7	6.7	6.7
	45	2	4.4	4.4	11.1
	50	16	35.6	35.6	46.7
	55	14	31.1	31.1	77.8
	60	5	11.1	11.1	88.9
	65	4	8.9	8.9	97.8
	70	1	2.2	2.2	100.0
	Total	45	100.0	100.0	

Based on the table 4.7 above, 3 students or 6,7% got 40, 2 students or 4,4% got 45, 16 students or 35.6% got 50, 14 students or 31,1% got 55, 5 students or 11,1% got 60, 4 students or 8,9% got 65, and 1 student or 2,2% got 70.

Table 4.8
Frequency of post-test score of Control group

posttest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	50	6	13.3	13.3	13.3
	55	12	26.7	26.7	40.0
	60	9	20.0	20.0	60.0
	65	10	22.2	22.2	82.2
	70	5	11.1	11.1	93.3
	75	3	6.7	6.7	100.0
	Total	45	100.0	100.0	

After the treatment, the students got improved their score. Based on the table 4.8 above, 6 students or 13,3% got 50, 12 students or 26,7% got 55, 9 students or 20% got 60, 10 students or 22,2% got 65, 5 students or 11,1% got 70, and 3 students or 6,7% got 75.

B. Hypothesis Testing

There were two hypotheses here that was f and t hypothesis. Before discussing the t-test, the researcher needed to test the f-test. F-test is used to know the equality of variance of the two groups. And, the t-test was used to test the two means (experimental and control group). Although, the f-test was automatically serve in the SPSS table of t-test, the researcher write down f hypothesis as the requirement in quasi experiment (experimental and control group). The hypothesis of this research are as follow:

1. Hypothesis testing of F-test

   a. Ho: Both varience are the same (experimental and control group)

   b. Ha: Both varience are different (experimental and control group)

   If *p*-value (Sig) bigger than 0.05 the null hypothesis (Ho) is not rejected. As such, *equal variances* is used. Then, if *p*-value (Sig) less than 0.05 the null hypothesis (Ho) is rejected. As such, *equal variances not assumed* is used.

2. Hypothesis testing of T-test

   a. Null Hypothesis (Ho)

   There is no significant different score on the students' reading comprehension between students' taught with and without using

Question Answer Relationship at the seventh grade of MTs. Ma'arif

Bakung in the academic year 2018/2019.

b. Alternative Hypothesis (Ha)

There is significant different score on the students' reading

comprehension between students' taught with and without using

Question Answer Relationship at the seventh grade of MTs. Ma'arif

Bakung in the academic year 2018/2019.

1) If sig(2-tailed) > 0,05, means that Ho is accepted and Ha is rejected.

2) If sig(2-tailed) < 0,05, means that Ho is rejected and Ha is accepted.

To know whether there is any significant different students reading

comprehension between the students who are taught and the students who are

no taught by using Question Answer Relationship, the researcher analyzed

the data by using SPSS 18.0 version, the result can be seen on table as below:

Table 4.9
The Result of Independent Samples Test

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
nilai	Equal variances assumed	.090	.765	9.705	88	.000	18.333	1.889	14.579	22.087
	Equal variances not assumed			9.705	87.695	.000	18.333	1.889	14.579	22.088

Based on the table 4.9 above, it showed that F was 0.090 it meant that F (0.090) was bigger than 0.05 and Ho was accepted. It can be concluded that both variance experimental and control group are the same. The result is the researcher used Equal Variance Assumed in making decision of t-test.

In addition, the significant value of the t (2-tailed) was 0.000. Because it was lower than the significant 0.05, it was concluded that there was a significant difference in the students' achievement between the experimental and the control groups in reading comprehension. It meant that the null hypothesis (Ho) was rejected and alternative hypothesis (Ha) was accepted. In other words, it could be concluded that there was a significant difference on students' score in the teaching reading comprehension between those who were taught by using Question Answer Relationship strategy and those who were not.

C. Discussion

Regarding to the research findings above, the data were analyzed with the helped of SPSS program 18.0 version. The calculation of the achievement using t-test showed that there was significant difference of students' achievement before and after those who were taught by using Question Answer Relationship and those who were not. The mean of control group in pre-test was 53.56 and in post-test improved to be 60.56. Then, the mean of experimental group of pre-test was 60.96 and in post-test improved to 80.21.

It can be interpreted that the reading comprehension ability of the student had been improved after getting the treatment. On the output of t-test showed that the significant value of the t (2-tailed) was 0.000. Because it was lower than the significant 0.05, it was concluded that there was a significant difference in the students' achievement between the experimental and the control groups in mastering reading comprehension. It meant that the null hypothesis (Ho) was rejected and alternative hypothesis (Ha) was accepted. In other words, it can be concluded that there was a significant difference on students' score in the teaching reading between those who were taught by using Question Answer Relationship and those who were not.

From the result of data analysis above, strategy in teaching reading comprehension very influential to the students like Question Answer Relationship strategy. According to Strahler (2012:27) that Question Answer Relationship is a reading comprehension strategy that helps students understand the different types of relationships that exist among questions and answers, thus strengthening their understanding of texts. The absence of comprehension is related to not knowing the relevant questions to ask, or not knowing how to find the relevant answers. In addition, the Question Answer Relationship strategy helps learners integrate information within a reading, relate textual information to their own prior knowledge, and monitor their understanding while reading. Essentially, by understanding the different types of relationships between questions and answers, students will have a better understanding of how to both generate and respond to questions. English language in Indonesia has taken a special attention due to the fact that

people's awareness on the importance of English as the main means of communication in the global era is getting increased, Nurhayati (2015).

The result of this research was also similar to the previous studies. The first was the research from Sari (2017). This study used quasi experimental research design. The result of the study was that post-test mean score of experimental class was 71.33, while post-test mean score of controlled class was 66.66. Compared with previous research, this research used quasi experimental design also. Howerver the result of the study was that post-test mean score of experimental class was 80.21, while post-test mean score of controlled class was 60.56. So, it means that there is significant different from the result findings from the previous study with this research.

The second was a study from Erdiana (2017). She used pre-experimental research design by using one group pre-test with quantitative approach. She found that Question Answer Relationship was effective to increase students' reading comprehension. The result of this study was that pre-test was 50 and in post-test increased was 70. Compared with previous research, this research used quasi experimental design while Erdiana's research used pre-experimental research design. Although the finding of this research and Erdiana's research were the same, that Question Answer Realtionship strategy was effective in teaching reading comprehension.

The third study came up from Sada (2014), this research is a pre-experimental study. She found that Question Answer Relationship was effective to increase students' reading comprehension. Compared with previous research, this research used quasi experimental design while Sari's

research used pre-experimental research design. However, the result of this research the same that Question Answer Realtionship strategy was effective in teaching reading comprehension.

Based on the result of this study above indicates that the Question Answer Relationship (QAR) Strategy treatment increase students' ability in reading comprehension. And also it proved that this strategy is also effective to use in junior high school. It's stated by Raphael *et al* (2005:213) that QAR instruction can be adjusted for use across grade levels and content areas because of the way the categories form a progression of difficulty. The researcher used Question Answer Relationship to teach reading comprehension at the seventh grade students of MTs Ma'arif Bakung.