**CHAPTER IV**

**THE RESULTS OF THE STUDY**

1. **The Description of The Data**

In this chapter, the researcher described the data that gotten from the students of MTs. Darul Hijrah Wal Banna and the subject of this research is the eighth grades students. In this research, she took 60 students as the sample. The researcher divided them into two groups, 30 students as experimental class from VIII A and 30 students as control class from VIII B.

To know how the effectiveness of teaching reading by using Question–Answer Relationship (QAR) in teaching reading comprehension on recount text, the students conducted field research and gave the students pre-test before teaching and used QAR in the experiment class and after teaching used QAR the researcher gave post-test and it would be used as data in the research.

Each of the tests, pre-test and post-test consists of 20 multiple choice. Having finished the field research, the researcher got the score as follow:

1. The score of pre-test and post-test of experiment class

The students in VIII A Class as experiment class obtained mean score 56 for pre-test and 64,8 for post-test. The score they got in these tests would be described in following table:

**Table 4.1**

**The Score of Pre-Test and Post Test**

**In Experiment Class**

| **No** | **Initial Name** | **Pre-test** | **Post-test** |
| --- | --- | --- | --- |
|  | SH | 65 | 75 |
|  | AF | 50 | 60 |
|  | HR | 50 | 65 |
|  | AM | 75  | 80 |
|  | DTD | 50 | 60 |
|  | RR | 50 | 65 |
|  | S | 60 | 70 |
|  | SS | 50 | 55 |
|  | NS | 50 | 65 |
|  | SR | 50 | 60 |
|  | AS | 65 | 70 |
|  | KDS | 50 | 65 |
|  | FAR | 65 | 75 |
|  | ABP | 70 | 80 |
|  | MA | 50 | 60 |
|  | RS | 50 | 55 |
|  | RAA | 50 | 65 |
|  | AP | 50 | 55 |
|  | N | 75 | 80 |
|  | NM | 50 | 55 |
|  | SPS | 60 | 65 |
|  | SR | 60 | 70 |
|  | SAP | 55 | 60 |
|  | FA | 50 | 60 |
|  | RB | 60 | 65 |
|  | BAN | 55 | 65 |
|  | BR | 50 | 60 |
|  | AF | 60 | 65 |
|  | MI | 55 | 60 |
|  | UI | 50 | 60 |
|  |  | $\sum\_{}^{}X=$**1.680** | $\sum\_{}^{}X$ **=1.945** |
| ***M=56*** | ***M=64,8*** |

Mean of Pre-test:

X = $\frac{\sum\_{}^{}X\_{1}}{N\_{1}}$ = $\frac{1.680}{30} $= 56

Mean of Post-test:

M1 = $\frac{\sum\_{}^{}X\_{1}}{N\_{1}}$ = $\frac{1.945}{30}$ = 64,8

Based on the calculation on the table 4.1 of pre-test and post-test assessment at experimental class, it showed that the result of experiment class got the significant improvement after giving treatment. It seen from the average score of post-test is better than the average score pre-test, that is 64,8 > 56 The students’ improvement score caused by the researcher used the QAR in teaching learning process. If seen from the students’ improvement score it means that the program used is success in teaching reading comprehension on recount text.

The researcher described the students’ improving score of pre-test and post-test at the experimental class by the graphic as follow :

**Graphic 4.1**

**Score Pre-Test and Post-Test at Experimental Class**

The graphic above showed about the comparison between score of pre-test and post-test at the experimental class. According to the graphic above the score of post-test is better than the score of pre-test commonly.

1. The score of pre-test and post-test of control class.

The students in VIII B Class as control class obtained mean score 39,2 for pre-test and 47,2 for post-test. The score they got in these tests would describe in following table:

**Table 4.2**

**The Score of Pre-test and Post-test in control class**

| **No** | **Initial Name** | **Pre-test** | **Post-test** |
| --- | --- | --- | --- |
|  | BA | 30 | 40 |
|  | NA | 45 | 55 |
|  | RSP | 20 | 30 |
|  | ANK | 35 | 45 |
|  | AT | 30 | 50 |
|  | IS | 50 | 45 |
|  | IM | 50 | 40 |
|  | LK | 55 | 65 |
|  | NH | 50 | 55 |
|  | RAR | 30 | 50 |
|  | NHH | 40 | 55 |
|  | RA | 55 | 60 |
|  | KW | 60 | 65 |
|  | YN | 55 | 60 |
|  | LA | 30 | 35 |
|  | SJ | 50 | 55 |
|  | LS | 50 | 60 |
|  | YA | 55 | 60 |
|  | MA | 30 | 45 |
|  | YF | 60 | 50 |
|  | AG | 20 | 50 |
|  | NF | 30 | 45 |
|  | MRR | 25 | 50 |
|  | KP | 30 | 55 |
|  | SM | 40 | 45 |
|  | SMI | 45 | 40 |
|  | SHP | 30 | 45 |
|  | CR | 20 | 40 |
|  | MR | 25 | 55 |
|  | IF | 30 | 40 |
|  |  | $\sum\_{}^{}X$ **=1.175** | $\sum\_{}^{}X$ **=1.415** |
| ***M=39,2*** | ***M=47,2*** |

Mean of Pre-test :

X = $\frac{\sum\_{}^{}X\_{1}}{N\_{1}}$ = $\frac{1.175}{30} $= 39,2

Mean of Post-test :

M1 = $\frac{\sum\_{}^{}X\_{1}}{N\_{1}}$ = $\frac{1.415}{30}$ = 47,2

Based on explanation above, it showed that the result of control class did not have the significant improvement. It seen from the average score of pre-test and post-test that is 39,2 and 47,2. It caused the control class did not used QAR in learning teaching process on reading comprehension of recount text.

The researcher described the score of pre-test and post-test at the control class by the graphic as follow :

**Graphic 4.2**

**Scores Pre-Test and Post-Test at Control Class**

The graphic above showed about the comparison between score of pre-test and post-test at the control class. According to the graphic above the score of post-test is better than the score of pre-test commonly.

1. **Data Analysis**

After getting the data from the post-test score of two classes, then the researcher analyzed it by using t-test. The result calculation of post-test at the Experiment Class and the Control Class would describe in following table:

**Table 4.3**

**The result calculation of post-test at the Experiment Class (X12) and the Control Class (X22)**

| **No.** | **Score** | **x1** | **x2** | **x12** | **x22** |
| --- | --- | --- | --- | --- | --- |
| **X1** | **X2** |
| 1. | 75 | 40 | 10,2 | -7,2 | 104,04 | 51,84 |
| 2. | 60 | 55 | -4,8 | 7,8 | 23,04 | 60,84 |
| 3. | 65 | 30 | 0,2 | 17,2 | 0,04 | 295,84 |
| 4. | 80 | 45 | 15,2 | -2,2 | 231,04 | 4,84 |
| 5. | 60 | 50 | -4,8 | 2,8 | 23,04 | 7,84 |
| 6. | 65 | 45 | 0,2 | -2,2 | 0,04 | 4,84 |
| 7. | 70 | 40 | 5,2 | -7,2 | 27,04 | 51,84 |
| 8. | 55 | 65 | -9,8 | 17,8 | 96,04 | 316,84 |
| 9. | 65 | 55 | 0,2 | 7,8 | 0,04 | 60,84 |
| 10. | 60 | 50 | -4,8 | 2,8 | 23,04 | 7,84 |
| 11. | 70 | 55 | 5,2 | 7,8 | 27,04 | 60,84 |
| 12. | 65 | 60 | 0,2 | 12,8 | 0,04 | 163,84 |
| 13. | 75 | 65 | 10,2 | 17,8 | 104,04 | 316,84 |
| 14. | 80 | 60 | 15,2 | 12,8 | 231,04 | 163,84 |
| 15. | 60 | 35 | -4,8 | -12,2 | 23,04 | 148,84 |
| 16. | 55 | 55 | -9,8 | 7,8 | 96,04 | 60,84 |
| 17. | 65 | 60 | 0,2 | 12,8 | 0,04 | 163,84 |
| 18. | 55 | 60 | -9,8 | 12,8 | 96,04 | 163,84 |
| 19. | 80 | 45 | 15,2 | -2,2 | 231,04 | 4,84 |
| 20. | 55 | 50 | -9,8 | 2,8 | 96,04 | 7,84 |
| 21. | 65 | 50 | 0,2 | 2,8 | 0,04 | 7,84 |
| 22. | 70 | 45 | 5,2 | -2,2 | 27,04 | 4,84 |
| 23. | 60 | 50 | -4,8 | 2,8 | 23,04 | 7,84 |
| 24. | 60 | 55 | -4,8 | 7,8 | 23,04 | 60,84 |
| 25. | 65 | 45 | 0,2 | -2,2 | 0,04 | 4,84 |
| 26. | 65 | 40 | 0,2 | -7,2 | 0,04 | 51,84 |
| 27. | 60 | 45 | -4,8 | -2,2 | 23,04 | 4,84 |
| 28. | 65 | 40 | 0,2 | -7,2 | 0,04 | 51,84 |
| 29. | 60 | 55 | -4,8 | 7,8 | 23,04 | 60,84 |
| 30. | 60 | 40 | -4,8 | -7,2 | 23,04 | 51,84 |
| $$\sum\_{}^{}$$ | 1.945 | 1.415 |  | 1.574,2 | 2.426,2 |

After that the researcher calculated them based the t-test formula:

1. The average score of experimental class.



1. The average score of control class.



1. Sum of the squared deviation score of experimental class.

∑X12  = 1.574,2

1. Sum of the squared deviation score of control class.

∑X22  = 2.426,2

1. Determining t-*table* (tt) by using formula:

df = N1 + N2 – 2 = 30 + 30 = 58

Because the value of 58 is not available in the t-*table*, the researcher used the closer to 58 that is 60 as degree of freedom (df).



 

 

 

 

From the result of the calculation above, it is obtained that the value of to (tobservation) is 8,67. After that the data, the researcher compared it with tt (ttable) both in degree significance 5% and 1%.

1. **Hypothesis Testing**

To prove it, the data obtained from experiment class and control class are calculated with the assumption as follow :

If to > tt : The alternative hypothesis was accepted. It means that there is significant influence of teaching reading comprehension between used Question-Answer Relationship and without Question-Answer Relationship.

If to < tt  : Null hypothesis was rejected. It means that there is no significant influence of teaching reading comprehension between using Question-Answer Relationship and without Question-Answer Relationship.

From the result of the calculation above, it is obtained that the value of to (t observation) is 8,67, degree freedom (*df*) is 58. There is no degree of freedom for 58, so the researcher used the closer *df* from 60. In degree of significance 5% from 60 (t table) = 2,00, in degree of significance 1% from 60 (t table) = 2,66.

After that the data, the researcher compared it with tt (t table) both in degree significance 5% and 1%. Therefore, to : tt = 8,67 > 2,00 in degree of significance 5% and to : tt = 8,67 > 2,66 in degree of significance 1%.

The statistic hypothesis stated that if to is higher than tt, it showed that *Ha* (alternative hypothesis) of the result was accepted and *Ho* (null hypothesis) was rejected. It means that there is influence of teaching reading comprehension between using QAR and without QAR.

1. **Data Interpretation**

In the class VIII A as experimental class, the highest score of pre-test is 75 and the lowest score is 50. The highest score of post-test is 80 and the lowest score was is 55. The mean of pre-test score obtained by students in this class is 56 and the mean of post-test is 64,8. The mean of pre-test and post-test score has good enough improvement it seen by 64,8 > 56. The improvement caused by the experimental class have learned reading comprehension of recount text by using QAR that not used by teacher before.

In class VIII B as control class, the highest score of pre-test is 60 and the lowest score is 20. The highest score of post-test is 65 and the lowest score is 30. The mean of pre-test and post-test in this class is 39,2 and 47,2. There is no significant improvement of the result in this class, it seen from the mean that is 39,2 and 47,2 which improved 8 score. It caused by the control class did not learn using Question-Answer Relationship on reading comprehension especially in teaching recount text.