**CHAPTER IV**

**RESEARCH FINDING AND DISCUSSION**

1. **Research Finding**

The research was conducted from September 29th until October 6th, 2018 to the 10th grade of *MA Al-Amin,* in which there were 30 students from one class taken as the sample of the research. In collecting the data, the writer gave reading comprehension test to the students. The data were analyzed to find out the result of pre-test and post-test. T-test formula was used for analyzing the data.

1. **Description of Pre-Test Score**

In this research, the writer gave reading comprehension test to 30 students. The test was multiple choices, consisting of 20 items. From the result, it was found that the highest score was 90 and the lowest score was 25.

Based on the data which were calculated, the scores were presented in the table of frequency distribution. The scores were shown in the following table.

**Table 4.1**

**Frequency Distribution of Pre-Test Score**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No.** | **Class Interval** | **Class Boundary** | **Midpoint**  | **Fabsolute** | **Frelative (%)** |
| 1. | 25-33 | 24.5-33.5 | 29 | 1 | 3% |
| 2. | 34-42 | 33.5-42.5 | 38 | 2 | 7% |
| 3. | 43-51 | 42.5-51.5 | 47 | 3 | 10% |
| 4. | 52-60 | 51.5-60.5 | 56 | 2 | 7% |
| 5. | 61-69 | 60.5-69.5 | 65 | 3 | 10% |
| 6. | 70-78 | 69.5-78.5 | 74 | 12 | 40% |
| 7. | 79-87 | 78.5-87.5 | 83 | 6 | 20% |
| 8. | 88-96 | 87.5-96.5 | 91 | 1 | 3% |
| 9. | 97-100 | 96.5-100 | 98 | 0 | 0% |
| **TOTAL** | N=30 | 100% |

Based on the frequency distribution in Table 4.1, it can be seen that there was one student who got the score at the range of 25-30), and 7 % of them were in the range of 34-42. Moreover, at the range 43-51, there was around 10% of them, and another 10% at the range of 61-69. There were only two students who got the scores at the range 52-60, but 40% of them were at the range of 70-78. And then, range of 88-96, there was only 3% of the students. At the last, there were no students at the range of 97-100. The results of the pre-test is also described in the polygon graph at picture 4.1.

*Figure 4.1 Polygon Graph of Pre-Test Score*

From the polygon graph above, it can be seen the different heights of each bar in the graph while each bar presents frequency of the data. The highest bar shows most of the students’ scores in that range. The lowest bar least of students’ scores in that range. The most students are in range shows score 69.5-78.5 and the least students are in the range 97-100.

1. **Description of Post-Test Score**

From the results of the post test, it was found that the highest score was 100 and the lowest was 65. It was obtained after given three treatments. It shows that the scores of the post-test is higher than pre-test score.

Based on the data which were calculated, hence the scores are presented in the table of frequency distribution of post-test scores. The scores are shown in the following table.

**Table 4.2**

**Frequency Distribution of Post-Test**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No.** | **Class Interval** | **Class Boundary** | **Midpoint**  | **Fabsolute** | **Frelative (%)** |
| 1 | 25-33 | 24.5-33.5 | 29 | 0 | 0% |
| 2 | 34-42 | 33.5-42.5 | 38 | 0 | 0% |
| 3 | 43-51 | 42.5-51.5 | 47 | 0 | 0% |
| 4 | 52-60 | 51.5-60.5 | 56 | 0 | 0% |
| 5. | 61-69 | 60.5-69.5 | 65 | 2 | 7% |
| 6. | 70-78 | 69.5-78.5 | 74 | 1 | 3% |
| 7. | 79-87 | 78.5-87.5 | 83 | 10 | 33% |
| 8. | 88-96 | 87.5-96.5 | 91 | 14 | 47% |
| 9. | 97-100 | 96.5-100 | 98.5 | 3 | 10% |
| **TOTAL** | N=30 | 100% |

Based on the table, there were no students at the range of 25-60, but 7% of them were at the range of 61-69. Then, one student was at the range of 70-78, and 10 students were at the range of 79-87. Moreover, 14 students or 47% of them got the scores at the range of 85-99, and 3 students or 10% of them were at the range of 97-100.

*Figure 4.2 Polygon Graph of Post-Test Score*

Based on the graph above, it indicates that most students are in range score 87.5-96.5.

To find out the effect of the treatments on students’ reading comprehension, the result of pre-test was compared to the result of post-test used the formula t-test. There were several steps to know the effect of the treatment on students’ reading comprehension. The first was Calculating mean of gain to find out the average of Gain’s (the result of posttest minus pretest), total of gain score divided by total of sample. Calculating deviation of Gain was the second step to intend every gap score between Gain and mean of Gain. After finding the mean and deviation, the writer needed to calculate the t-test to find out t-test value. The last was finding the degree of freedom and testing hypothesis to know the minimum limit of the results of the t-test. Here is the calculations:

1. **Calculating the Mean of Gain (Md)**

Calculating mean of gain is to find out the average of Gain’s (the result of posttest minus pretest), total of gain score divided by total of sample. Here is the calculation.

**

 *= 655*

 *30*

 *= 21.8*

The result shows that the average of Gain (the results of all samples) is 21.8.

1. **Calculating Deviation of Gain (Xd)**

Calculating deviation of Gain is to intend every gap score between Gain and mean of Gain. The score of deviation of Gain should be counted one by one based on the total number of sample, which is calculated of the one sample as follows.

d = Posttest – Pretest

 = 90 – 90

 = 0

Xd = d – Md

 = 0 – 21.8

 = - 21.8

The result shows that the deviation one of the sample was - 21.8

1. **Calculating the t-test**

After finding the mean and deviation, the writer needed to calculate the t-test to find out t-test value. The calculation is as follows.

$$t=\frac{M\_{d}}{\sqrt{\frac{\sum\_{}^{}x\_{d}^{2}}{n(n-1)}}}$$

$$t=\frac{21.8}{\sqrt{\frac{8324.17}{30(30-1)}}}$$

$$t=\frac{21.8}{\sqrt{\frac{8324.17}{870}}}$$

$$t=\frac{21.8}{\sqrt{9.568}}$$

$$t=\frac{21.8}{3.1}$$

$$t=7.03$$

The result shows that the average comparative hypothesis of two samples is 7.03

1. **Finding Degree of Freedom and Testing Hypothesis**

The degree of freedom was calculated after t-test value was found out. It was intended to find out the t-table value. The calculation is as follows.

$$df =n-1$$

$$=30-1$$

$$=29$$

The result shows that the degree of freedom is 29. Based on t-table, the degree of freedom 29 at significant level 0.05 is 2.05 while at the level significant of 0.01 is 2.76.

Based on the calculation, it was found that t-calculated was 7.03. The value of degree of freedom ($d.f$) value was 29, and the list of t-table value at significant level 0.05 was 2.05 and at significant level 0.01 is 2.76. The result of the test can be shown as 2.76 <7.03> 2.05. It means that the value of t-table is lower than the value of t-calculated. It can be concluded that the alternative hypothesis (*Ha*) is accepted and the null hypothesis (*Ho*) is rejected.

1. **Discussion**

In conducting this research, some tests and treatments were conducted by the writer. First, the students were given pre-test, and they were asked to answer 20 multiple choice questions that consist of skimming and scanning skills, reference and vocabulary. Second, three treatments were given to the students, by applying the technique of One Stays the Rest Stray. The last, the students were given a post-test.

In applying One Stays the Rest Stray technique, there were several steps used. The first, students were divided into 8 groups. The second, each group was given a different paragraph and they discussed the paragraph they got. After that, one of the members stayed in their group while the rests strayed to other groups to ask the information about other paragraphs. The next, the students returned to their previous group or based group after they have already got the information from other groups about the content of other paragraphs. The fourth, all groups discussed all the information from each paragraph. The last, the teacher gave questions about the paragraphs to the all the groups.

From the calculation, it was found that the mean of difference was 21.83 with the total of the degree of deviation difference is 8324.17. The t-test value that writer got was 7.03 with the degree of freedom was 29. The value of t-table on $df$29 with the level of significance 0.05 was 2.05 while the level significance 0.01 was 2.76. The result of the test can be described as 2.76 <7.03> 2.05. The value of t-calculated is higher than t-table. So, the alternative hypothesis (*Ha*) is accepted and null hypothesis (*Ho*) is rejected. It means that the use of One Stays the Rest Stray technique enhances students’ reading comprehension.

The writer took the data from the pre-test and post-test scores. Before the instruments were given to the students, he tried to test the validity and reliability of the instruments used SPSS Statistic application. After the data were collected, the results were calculated by using t-test formula. Firstly, the writer calculated the difference of pre-test and post-test scores. Then, he counted the mean and the deviation of difference. After finding the mean and deviation of difference, he calculated t-test to find out t-test value. In addition, he also calculated the degree of freedom to find t-table value and stated the hypothesis. The research finding showed that there were different results of the students’ scores between the pre-test and the post-test. The post-test scores were higher than the pre-test and the comparison was so far.

After the data were calculated, the result of the research showed that the use of One Stays the Rest Stray technique enhanced students’ reading comprehension. The research finding also showed significant differences of the students’ scores between the pre-test and the post-test. The result is relevant to Wijayanti (2013: 1) who defines that one stay-the rest stray strategy is a learning group method that can help student to express understanding, speaking, thinking process, and clarify understanding.

The result of the research also showed that the use of One Stays the Rest Stray technique is one of effective ways to help students comprehend the text easier and make the learning process more interesting. It is also supported by Johnson et al (2000) in Surjosuseno (2011) who expresses that using one stays and the rests stray can help the students keep on task, speak orally, recall the knowledge, and comprehend the text well and happily. It can be proved when One stays the Rest Stray technique was applied at *MA Al-Amin*. The learning process was more attractive and effective.