### **CHAPTER IV**

# **RESEARCH FINDINGS AND DISCUSSION**

# 4.1 Findings

#### **4.1.1 Description of the Data**

This study obtained the data through two tests, i.e. the pre-test and the post-test. Based on the test results in both classes, there are several scores that become data in this study, such as the *minimum* score, the *maximum* score, the *mean* score, and the *standard deviation* score. These scores are described in Table 4.1.

| Table 4.1. Descriptive Statistics | S |
|-----------------------------------|---|
|-----------------------------------|---|

| Descr | iptive | Statisti | ics |
|-------|--------|----------|-----|
|       |        |          |     |
|       |        |          |     |

|                        | N  | Range | Minimum | Maximum | Mean  | Std. Deviation |
|------------------------|----|-------|---------|---------|-------|----------------|
| Pre-Test Control       | 26 | 44    | 20      | 64      | 40.00 | 10.673         |
| Post-Test Control      | 26 | 32    | 60      | 92      | 72.62 | 8.668          |
| Pre-Test Experimental  | 21 | 44    | 24      | 68      | 49.33 | 10.906         |
| Post-Test Experimental | 21 | 32    | 68      | 100     | 84.19 | 8.047          |
| Valid N (listwise)     | 21 |       |         |         |       |                |

In regards to the above table, it can be identified that the scores consist of two classes and two types of tests, i.e. pre-test in the control class, post-test in the control class, pre-test in the experimental class, and post-test in the experimental class. In the control class, the *max* score on the pre-test was 64, the *min* score was 20, the *mean* score was 40, and the *standard deviation* score was 10.673. On the other hand, on the post-test, the *max* score was 92, the *min* score was 60, the *mean* score was 72.62, and the *standard deviation* score was 8.668.

Meanwhile, in the experimental class, on the pre-test, the *max* score was 68, the *min* score was 24, the *mean* score was 49.33, and the *standard deviation* score was 10.906. On the post-test, the *max* score was 100, the *min* score was 68, the *mean* score was 84.19, and the *standard deviation* score was 8.047.

| Na         | Studente Initiale | Class X-1                        |                  |  |  |
|------------|-------------------|----------------------------------|------------------|--|--|
| INO        | Students Initiais | Pre-Test                         | Post-Test        |  |  |
| 1.         | AHA               | 24                               | 68               |  |  |
| 2.         | AF                | 32                               | 76               |  |  |
| 3.         | AL                | 40                               | 76               |  |  |
| 4.         | DA                | 32                               | 64               |  |  |
| 5.         | F                 | <b>4</b> 4                       | 80               |  |  |
| 6.         | HHR               | 60                               | 84               |  |  |
| 7.         | НА                | 32                               | 60               |  |  |
| 8.         | LA                | 64                               | 92               |  |  |
| 9.         | MRW               | 44                               | 80               |  |  |
| 10.        | MHY               | 40                               | 64               |  |  |
| 11.        | MAG               | 32                               | 60               |  |  |
| 12.        | MHR               | 40                               | 72               |  |  |
| 13.        | MZW               | 40                               | 68               |  |  |
| 14.        | NA                | 52                               | 80               |  |  |
| 15.        | NS                | 36                               | 80               |  |  |
| 16.        | NN                | 36                               | 84               |  |  |
| 17.        | LINIVERSITAS      | 40                               | 72               |  |  |
| 18.<br>19. | MATERRA U         | $\operatorname{TAR}_{40}^{20}$ M | ED <sub>68</sub> |  |  |
| 20.        | RA                | 44                               | 72               |  |  |
| 21.        | RA                | 24                               | 68               |  |  |
| 22.        | S                 | 32                               | 60               |  |  |
| 23.        | ST                | 44                               | 72               |  |  |
| 24.        | SAC               | 56                               | 76               |  |  |
| 25.        | YSA               | 52                               | 84               |  |  |
| 26.        | ZCSS              | 40                               | 64               |  |  |

In addition, the pre-test and post-test scores of each student in both classes are shown in Table 4.2 and Table 4.3.

| Minimum Score      | 20     | 60    |
|--------------------|--------|-------|
| Maximum Score      | 64     | 92    |
| Mean Score         | 40     | 72.62 |
| Standard Deviation | 10.673 | 8.668 |

| No. Students Initials |                   | Clas        | s X-2     |
|-----------------------|-------------------|-------------|-----------|
| 110                   | Stutents Initials | Pre-Test    | Post-Test |
| 1.                    | AWH               | 52          | 88        |
| 2.                    | AA 📉              | 56          | 84        |
| 3.                    | DW                | 52          | 88        |
| 4.                    | DZ                | 52          | 76        |
| 5.                    | ERSP              | 56          | 84        |
| 6.                    | FS                | 36          | 80        |
| 7.                    | FA                | 56          | 80        |
| 8.                    | FHH               | 40          | 76        |
| 9.                    | HA                | 32          | 72        |
| 10.                   | IS                | 56          | 84        |
| 11.                   | IS                | 60          | 88        |
| 12.                   | KA                | 44          | 84        |
| 13.                   | KIM               | 36          | 76        |
| 14.                   | MA                | 24          | 68        |
| 15.                   | UN MRS SITAS I    | SLAM52IEGEI | NI 92     |
| 16.                   | MATNRA U          | TAR64 M     | ED 100    |
| 17.                   | NS                | 68          | 100       |
| 18.                   | NH                | 56          | 88        |
| 19.                   | RS                | 52          | 84        |
| 20.                   | RFH               | 48          | 88        |
| 21.                   | ZFA               | 44          | 88        |
| Minimu                | ım Score          | 24          | 68        |
| Maxim                 | um Score          | 68          | 100       |

Table 4.3. The Scores of Pre-Test and Post-Test of Experimental Class

| Mean Score         | 49.33  | 84.19 |
|--------------------|--------|-------|
| Standard Deviation | 10.906 | 8.047 |

The results are also shown in Figure 4.1.



### 4.1.2 Analysis of the Data

This study did not only describe the data of the students' test as in Table 4.1, the researcher also analyzed the data using IBM SPSS Statistics 29.

### 4.1.2.1 Normality Test

# Table 4.4. The Normality Test Results

| Tests of Normality     |   |  |  |  |  |
|------------------------|---|--|--|--|--|
|                        | Shapiro-Wilk  |  |  |  |  |
| Class                  | df  | Sig.   |  |  |  |
| Pre-Test Control       | 26  | .321   |  |  |  |
| Post-Test Control      | 26  | .257   |  |  |  |
| Pre-Test Experimental  | 21  | .299   |  |  |  |
| Post-Test Experimental | 21  | .334   |  |  |  |
|                        | Tests of<br>Class<br>Pre-Test Control<br>Post-Test Control<br>Pre-Test Experimental<br>Post-Test Experimental | Tests of NormalityClassdfClassdfPre-Test Control26Post-Test Control26Pre-Test Experimental21Post-Test Experimental21 |  |  |  |

a. Lilliefors Significance Correction

\*. This is a lower bound of the true significance

Based on Table 4.4, in the Shapiro-Wilk column, the significance value of the pre-test results in the control class is 0.321, while the post-test results is 0.257. This showed that the data on both tests in the control class were normally distributed. It is because the significance value is greater than 0.05.

Moreover, in the experimental class, the data were 0.299 on the pretest and 0.334 on the post-test.

#### 4.1.2.2 Homogeneity Test

After the results of normality test showed the data are normally distributed, the researcher analyzed the data further through homogeneity test to check whether it is homogeneous. However, this test only requires post-test scores in both classes to be analyzed. The results lie in Table 4.5.

Table 4.5. The Homogeneity Test Results Test of Homogeneity of Variance

|          |                                      | Levene Statistic | df1 | df2    | Sig. |
|----------|--------------------------------------|------------------|-----|--------|------|
| Outcomes | Based on Mean                        | .732             | 1   | 45     | .397 |
|          | Based on Median                      | .625             | 1   | 45     | .433 |
|          | Based on Median and with adjusted df | .625             | 1   | 44.618 | .433 |
|          | Based on trimmed mean                | .671             | 1   | 45     | .417 |

To decide if the data is homogeneous or not, the significance value has to be greater than 0.05. From Table 4.5, in *Based on Mean* the significance value is 0.397. It means that data are homogeneous due to the significance value indicates 0.397>0.05.

# 4.1.2.3 Independent Sample T-Test

This study used a hypothesis test called independent sample t-test, in which data is tested to compare two unpaired samples. Similar to the homogeneity test, this kind of test also only uses post-test data in both classes. The results are explained in Table 4.6.

Table 4.6. The Independent Sample T-Test Results

|          |                             | Levene's Test for Equality of Variances |      |  |
|----------|-----------------------------|---|------|--|
|          |                             | F                                       | Sig. |  |
| Outcomes | Equal variances assumed     | .732                                    | .397 |  |
|          | Equal variances not assumed |   |      |  |

| independent Sumples Fest |                             |                              |        |                     |                    |
|--------------------------|-----------------------------|------------------------------|--------|---------------------|--------------------|
|                          |                             | t-test for Equality of Means |        |                     |                    |
|                          |                             | t                            | df     | Sig. (2-<br>tailed) | Mean<br>Difference |
| Outcomes                 | Equal variances assumed     | -4.698                       | 45     | .000                | -11.575            |
|                          | Equal variances not assumed | -4.736                       | 44.079 | .000                | -11.575            |

**Independent Samples Test** 

| Indepe | ndent | Sampl | es Test |  |
|--------|-------|-------|---------|--|
|        |       |       |         |  |
|        |       |       |         |  |

|          |                             | t-test for Equality of Means |  |        |  |
|----------|-----------------------------|------------------------------|--|--------|--|
|          |                             | Std. Error                   | 95% Confidence Interval of the<br>Difference |        |  |
|          |                             | Difference                   | Lower  | Upper  |  |
| Outcomes | Equal variances assumed     | 2.464                        | -16.537                                      | -6.613 |  |
|          | Equal variances not assumed | 2.444                        | -16.500                                      | -6.650 |  |

As the data in the homogeneity test is homogeneous, the result focuses only on the *Equal variances assumed* row. To find out the hypothesis results, this study can refer to the decision making which states that if the Sig. (2-tailed) value is smaller than 0.05, then the alternative hypothesis is accepted. In the Sig. (2-tailed) column, it can be seen that 0.000 is smaller than 0.05. In other words, the  $H_a$  is accepted.

# 4.2 Discussion

Based on the above results, this study answered the research question formulated in Chapter 1, where there is an effect of the partner reading strategy on reading comprehension. Moreover, the results are in similar line with previous studies where this strategy has an effect and improves students' reading comprehension skills. Nurafni's (2019) study found that there was an increase in student scores of 48.53% on the question type of determining the main idea and 32.86% on the question type of explaining supporting details.

In addition, Sinaga et al. (2020) concluded that the *mean* score on the pre-test in the control class was 34.35 and the experimental class was 49.19. While the *mean* score on the post-test in the control class was 45.16 and the experimental class was 79.67. The study, which analyzed the data mathematically, identified that the partner reading strategy had a positive effect on question types, such as inference and main idea identification questions.

Moreover, in other studies, the results also showed significant effects. Zulianti & Hasmoto (2022) found that in cycle 1 the *mean* score increased from 71.03 to 85.38 in cycle 2. The study concluded that this strategy involved high learning participation and high self-confidence. Purba (2023) also concluded that the *mean* score on the post-test in the experimental class was 76.07 while in the control class it was 57.32. In addition, the Mann-Whitney test results showed an Assymp value: 0.000<0.05. Thus, H<sub>a</sub> is accepted. This was also experienced by Izzati (2023) that the *mean* score on the post-test in the post-test in the experimental class was 79.06, while in the control class it was 68.75.

Although this study has the same results as the studies above, there are two differences, namely scores and conclusions. Based on the description of the scores, there is a much different. In the control class, the *mean* score of the pre-test was 40 and the post-test was 72.62, the *min* score was 20 in the pre-test and 60 in the post-test, the *max* score was 64 in the pre-test and 92 in the post-test, and the *standard deviation* score was 10.673 in the pre-test and 8.668 in the post-test. In the experimental class, there are several scores obtained, such as the *mean* score of 49.33 in the pre-test and 84.19 in the post-test, the *min* score of 24 in the pre-test and 68 in the post-test, and the *max* score of 68 in the pre-test and 8.047 in the post-test.

In addition, statistical analysis was performed to find out further data. This study used IBM SPSS Statistics 29. In the normality test, the significance value of the pre-test in the control class was 0.321, the post-test in the control class was 0.257, the pre-test in the experimental class was 0.299, and the post-test in the experimental class was 0.334. Based on these values, all data were normally distributed, because those values were greater than 0.05. Moreover, the homogeneity test showed that the data was homogeneous. The result showed that

the value was greater than 0.05, namely 0.397>0.05. Furthermore, this study performed the independent sample t-test. The results showed that the Sig. (2-tailed) value was 0.000. Since the Sig. (2-tailed) value was 0.000<0.05, therefore  $H_a$  is accepted.

The results of this study also indicated that the partner reading strategy had a variety of effects on the main idea, vocabulary, reference, and inference sections of reading comprehension questions. As a result, this study has two implications. Since it requires a discussion to understand each other's issues, it assists students improve their reading comprehension skills. Furthermore, it encourages teachers to implement an effective strategy when teaching reading comprehension in the classroom.

