## CHAPTER IV FINDING AND DISCUSSION

This chapter to present the finding and the discussion. This chapter focus on the description and of data, the hypothesis of testing, and discussion.

## A. The Description of Data

In this chapter, the researcher presented the data of students' vocabulary between students' vocabulary mastery before and after being taught by using Memrise application in this Pandemic Covid-19 section. The study was conductes at SMN 9 Mesuji Raya Palembang. Here, the researchers want to know is there any significant difference between students' vocabulary before and after being taught by using Memrise application in the pandemic. The effectiveness can be seen from the significant scores from pre-test and posttest of students in pandemic.

The data obtained through tests namely pre-test and post-test. Test carried out to measure the level of vocabulary mastery. In this research, the researchers gave 20 questions of pre-test and post-test. In the questions pretest, there were 15 questions of multiple choices and 5 questions of fill in the blank in an essay. The question of post-test there is 20 questions, there were multiple choices.

Table 4.1 criteria Scores of vocabulary

| Score | Criteria |
| :---: | :---: |
| $85-100$ | Excellent |
| $75-80$ | Good |
| $55-70$ | Average |
| $35-50$ | Poor |
| $0-30$ | Very poor |

1. Student Score in Pre-test and Post-test
a. Pre-test

The pre-test was done on May $7^{\text {th }}, 2021$. The subject of the pre-test consist followed by 31 students of VII 1 class of SMPN Mesuji Raya Palembang that was sample was taken a sample. Students' vocabulary scores before being taught by using Memrise application. The researcher allocated 60 minutes for administration. The format of the question pre-test is multiple choices and complete the sentence.

Table 4.2 Score of before being taught by Memrise application

| No | Nama | Pre-test |
| :---: | :---: | :---: |
| 1 | AS | 50 |
| 2 | ADS | 50 |
| 3 | ADSN | 70 |
| 4 | AAN | 70 |
| 5 | BFP | 60 |
| 6 | DV | 60 |
| 7 | DMR | 80 |
| 8 | EA | 50 |
| 9 | IP | 55 |
| 10 | JA | 70 |
| 11 | KOC | 50 |
| 12 | KAS | 55 |
| 13 | KDW | 50 |
| 14 | LK | 65 |
| 15 | MEM | 60 |
| 16 | MNA | 50 |
| 17 | NG | 50 |
| 18 | NA | 55 |
| 19 | NKR | 55 |
| 20 | OF | 60 |
| 21 | RP | 55 |
| 22 | RS | 60 |
| 23 | RDP | 70 |
| 24 | SA | 70 |
| 25 | TK | 50 |
| 26 | YP | 50 |


| 27 | KZ | 50 |
| :---: | :---: | :---: |
| 28 | MN | 55 |
| 29 | HN | 70 |
| 30 | SN | 50 |
| 31 | DN | 55 |

1) Descriptive statistics of scores pre_test

The researchers used SPSS 16.0 version to know the descriptive statistic present the score of a pre-test. The result of the descriptive statistic was as follow:

Table 4.3 Descriptive Statistics Scores of Pre-test

|  | N | Minimum | Maximum | Sum | Mean | Std. Deviation |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Score Pre-test | 31 | 50 | 80 | 1800 | 58.06 | 8.532 |
| Valid N (listwise) | 31 |  |  |  |  |  |

According to the result of the table from SPSS, it is shown that the sum of the data was 1800 . The lowest score was 50 and the highest score was 80 . The mean of the score pre-test was 58.06 and the standard deviation was 8.532 .
2) Frequency scores of pre_test

To analyze the data the researcher used SPSS 16.0 version. The frequency of the pre-test displayed on the table below:

Table 4.4 Frequence Score Pre-test

|  |  |  | Valid <br> Percent | Cumulative <br> Percent |
| :--- | ---: | ---: | ---: | ---: |
| Valid 50 | 11 | 35.5 | 35.5 | 35.5 |
|  | 55 | 7 | 22.6 | 22.6 |
| 60 | 5 | 16.1 | 16.1 | 74.2 |
|  | 1 | 3.2 | 3.2 | 77.4 |
|  | 70 | 6 | 19.4 | 19.4 |

In the table from above, the result of frequency score of pretest was could be elaborated as follow:

1. There were 11 students who got a score of 50 and their score is poor.
2. There were 7 students who got a score of 55 and their score is average.
3. There were 5 students who got a score of 60 and their score is average.
4. There were 1 student who got a score of 65 and their score is average.
5. 6 students got a score of 70 and their score is average.
6. There was 1 student who got a score of 80 and their score is good.
b. Post-test

The pre-test was done on May $7^{\text {th }}, 2021$. The subject of the pre-test consist followed by 31 students of VII 1 class of SMPN Mesuji Raya Palembang that was sample was taken a sample. Students' vocabulary scores before being taught by using Memrise application. The researcher allocated 60 minutes for administration. The format of the question pre-test is multiple choices and complete the sentence.

Table 4.5 score of post-test

| No | Nama | Post-test |
| :---: | :---: | :---: |
| 1 | AS | 85 |
| 2 | ADS | 75 |
| 3 | ADSN | 85 |
| 4 | AAN | 75 |
| 5 | BFP | 65 |
| 6 | DV | 75 |
| 7 | DMR | 70 |
| 8 | EA | 80 |
| 10 | JA | 70 |
| 11 | KOC | 85 |
| 12 | KAS | 80 |
| 13 | KDW | 75 |
| 14 | LK | 70 |


| 15 | MEM | 80 |
| :---: | :---: | :---: |
| 16 | MNA | 75 |
| 17 | NG | 70 |
| 18 | NA | 75 |
| 19 | NKR | 85 |
| 20 | OF | 75 |
| 21 | RP | 85 |
| 22 | RS | 85 |
| 23 | RDP | 85 |
| 24 | SA | 70 |
| 25 | TK | 50 |
| 26 | YP | 85 |
| 27 | KZ | 80 |
| 28 | MN | 75 |
| 29 | HN | 70 |
| 30 | SN | 75 |
| 31 | DN | 75 |

1) Descriptive statistics of scores Post-test

The researchers used SPSS 16.0 version to know the descriptive statistic present the score of a pre-test. The result of the descriptive statistic was as follow:

Table 4.6 Descriptive Statistics Score of post-test

|  | N | Minimum | Maximum | Sum | Mean | Std. <br> Deviation |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| score post-test <br> Valid N <br> (listwise) | 31 | 50 | 85 | 2335 | 75.32 | 8.938 |

According to the result of the table from SPSS, it is shown that the sum of the data was 2335 . The lowest score was 50 and the highest score was 85 . The mean of the score post-test was 75.32 and the standard deviation was 8.938 .
2) Frequence of score post_test

Frequence is to analyze the data the researcher used SPSS 16.0 version. The frequency of the pre-test displayed on the table below:

Table 4.7 Frequency score post-test

|  |  | Frequency | Percent | Valid Percent | Cumulative <br> Percent |
| ---: | :--- | ---: | ---: | ---: | ---: |
| Valid | 50 | 2 | 6.5 | 6.5 | 6.5 |
|  | 65 | 1 | 3.2 | 3.2 | 9.7 |
|  | 70 | 6 | 19.4 | 19.4 | 29.0 |
|  | 75 | 10 | 32.3 | 32.3 | 61.3 |
|  | 80 | 4 | 12.9 | 12.9 | 74.2 |
|  | 85 | 25.8 | 25.8 | 100.0 |  |
|  |  | 100.0 | 100.0 |  |  |

In the table from above, the result of frequency score of pre-test was could be elaborated as follow:

1. There were 2 students who got a score of 50 and their score is poor.
2. There were 1 student who got a score of 65 and their score is average.
3. There were 6 students who got a score of 70 and their score is average.
4. There were 10 students who got a score of 75 and their score is good.
5. There were 4 students who got a score of 80 and their score is good.
6. There were 8 students who got a score of 85 and their score is excellent.

## 3. Normality and Homogeneity

1) The Result of Normality Testing

Normality testing is important to conduct determine whether the gained data was normal or not. In this result, the researchers used SPSS 16.0 version and for the analysis of the normality test, the researchers used Kolomogrov-Smirnov with the value significance of 0.05 .

Table 4.8 One-Sample Kolmogorov-Smirnov Test

|  |  | score pre-test | score post-test |
| :--- | :--- | ---: | ---: |
| N |  | 31 | 31 |
| Normal Parameters ${ }^{\mathrm{a}}$ | Mean | 58.06 | 75.32 |
|  | Std. Deviation | 8.532 | 8.938 |
| Most Extreme | Absolute | .221 | .195 |
| Differences | Positive | .221 | .139 |
|  | Negative | -.172 | -.195 |
| Kolmogorov-Smirnov Z |  | 1.230 | 1.087 |
| Asymp. Sig. (2-tailed) |  | .097 | .188 |

a. Test distribution is Normal.

The table above showed the result of testing normality. In this table are noted significance scores. The significance score of the pretest was 0.97 and the significance score of the post-test was 0.188 . The sig/p value on pre-test is 0.097 greater than $\operatorname{sig}=0.05(0.97>0.50)$. And, for the post-test score value sig/p is 0.188 greater than 0.05 ( 0.188 $>0.05)$. So, its mean data distribution was normality distributed.
2) The Result of Homogeneity Testing

Homogeneity tests were tested by researchers to see if the students were the same or homogeneity. The test to get the students' scores, the researcher then reduce the lowest to the
highest and a range higher class is more heterogeneous. In this result, the researchers use SPSS 16.0 version,

Table 4.9 Test of Homogeneity of Variances

| Result |  |  |  |
| ---: | ---: | ---: | ---: |
| Levene <br> Statistic | f 1 | f 2 |  |
| 1.416 |  |  |  |

As seen in the table the result of the homogeneity test was 0.258 , it's larger than $0.05(0.258>0.05)$. So, it can be concluded that the variance of the pre-test and post-test data was homogeneity.

## 3. Hypothesis Testing

Table 4.10 Paired Samples Test

|  | Paired Differences |  |  |  |  | t | df | Sig. <br> (2tailed ) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean | Std. <br> Deviatio $\square$ | Std. <br> Error <br> Mean | 95\% Confidence Interval of the Difference |  |  |  |  |
|  |  |  |  | Lower | Upper |  |  |  |
| Pair 1 score pretest - score post-test | -17.258 | 13.530 | 2.430 | -22.221 | -12.295 | -7.102 | 30 | . 000 |

Based on the table, that the t was -7.102 with the $\mathrm{df}=30$, and the p -value (twotailed) was 0.000 . given that the present was a one-tailed test. So, the p -value (0.000) was divided into : $0.000 / 2=0.000$. The significance t level was sig $=0.05$ for interpretation of decision-based on the result of probably, as a following;

1. If the probability value $(\mathrm{sig})>\operatorname{sig}=0.05$ then the null hypothesis was not rejected.
2. If the probability value (sig) $<\operatorname{sig}=0.05$ then the null hypothesis was rejected.

Based on the table, the sig $=0.000$ is smaller than the $\operatorname{sig}=0.05$. So, the null hypothesis was rejected and the null hypothesis was rejected. Hypothesis alternative means that the pre-test smaller than equal to its mean post-test was rejected. It's can conclude the hypothesis alternative of the post-test was higher than of the pre-test. The conclussion there is a significant different scores before and after being taught using Memrise application toward students vocabulary mastery of the first grade at SMPN 9 Mesuji Raya Palembang in pandemic covid-19. The Memrise application is effective toward students' vocabulary mastery.

## B. Discussion

This research was to investigate the effectiveness of using Memrise application toward students' vocabulary mastery of the first grade at SMPN 9 Mesuji Raya Palembang in the Pandemic Covid-19 section. The subject of the research were 31 students to pre-test and post-test. The researchers analyzed the data uses SPSS 16.0 version. The researchers conducted the research was one group to pre-test and post-test. Pre-test to find out students' scores before giving the treatment. The was given the treatment was
conducted in 3 meetings. The last is post-test is to find a score after gave the treatment to the students.

The result of this research from the pre-test and post-test scores conclude that the pre-test scores were smaller than the post-test scores. It provided the mean score pre-test and post-test, the mean pre-test was 58.06 and the mean of post-test was 75.32 . So, the mean of the pre-test smaller than the mean of the post-test. The Sum of the result for the pre-test was 1800 and the post-test was 2335 . The sum of the pre-test is smaller than the sum of the post-test. The result of the significance of testing normality is the significance score of pre-test was $\operatorname{sig}=0.97$ and the significance score of post-test was sig $=0.188$. The $\operatorname{sig} / \mathrm{p}$ value on pre-test is $\operatorname{sig}=0.097$ greater than $\operatorname{sig}=0.05$ $(0.97>0.50)$. And, for the post-test score value sig/p is 0.188 greater than sig $=0.05(\operatorname{sig}=0.188>\operatorname{sig}=0.05)$. So, its mean data distribution was normality distributed.

The result of homogeneity test was $\operatorname{sig}=0.258$, it's larger than $\operatorname{sig}=$ $0.05(\operatorname{sig}=0.258>\operatorname{sig}=0.05)$. So, it can be concluded that the variance of the pre-test and post-test data was homogeneity. The result of the T-test was -7.102 with the $\mathrm{df}=30$ and the p -value (two-tailed) was $\operatorname{sig}=0.000$. given that the present was a one-tailed test. So, the p -value $(\operatorname{sig}=0.000)$ was divided into : $0.000 / 2=0.000$. The sig $=0.000$ is smaller than the significance $\operatorname{sig}=$ 0.05. So, the null hypothesis was rejected. Hypothesis means that the pre-test smaller than equal to its mean post-test was rejected. It's can conclude the alternative hypothesis (Ha) of post-test was higher than of a pre-test.

From the result, it's mean effective if the Memrise toward students vocabulary mastery of the first grade at SMPN 9 Mesuji Raya Palembang in Pandemic Covid-19 section. The students also enjoy the techniques to learn with the application of vocabulary in the Pandemic Covid-19 section. Because now the condition in Indonesia Pandemic Covid-19 section and the school must be online learning Memrise is a good media toward vocabulary. Online learning with the telephone in their house the student learning by via Whatsapp can learn a vocabulary by Memrise Application. Memrise includes many languages but here focused on the English language. In Memrise many features to learn and can improve the English language for example vocabulary, listening, writing, pronunciation, reading, and also speaking.

The study aimed to ensure that effective if the Memrise toward students vocabulary mastery of the first grade at SMPN 9 Mesuji Raya Palembang in the Pandemic Covid-19 section from the different scores of the student. From the result was strongly from the previous study with the Memrise as a media, there are: The first from Elly Cholifatur Rosydah (Sunan Ampel State Islamic University Surabaya, 2018) conducted a study entitled "Improving Students'Mastery of Irregular Verb by using Memrise Application at the Tenth Grade of MAN Sidoarjo". The study was conducted to improve the students' mastery of irregular verbs by Memrise application. The second study from Dela Triani (IAIN Tulungagung, 2020) conducted a study entitled "The Effectiveness of Using Memrise Application Toward the Students Phrasal Verbs Mastery of the First Grade at SMAN 1 Gondang". Dela

Triani's research was conducted at SMAN 1 Gondang. The study was conducted to discover the effectiveness of using Memrise application.

The third from Dwi Ratna Ayu (UIN Sultan Maulana Hasanudin Banten, 2018) conducted a study entitled "The Effectiveness of Memrise Toward Students Listening Skill of Second Grade at SMK Yapidi Jayanti Tanggerang". The study to know the effectiveness of using Memrise in listening

The fourth study from Fadhilah Santri (IAIN ParePare, 2020) conducted a study entitled "The Effectiveness of Memrise application to Upgrade Students' Vocabulary at the Second Grade of MA DDI Kanang". Fadhilah's study aimed to know the result whether the students' vocabulary mastery can improving or not by using the Memrise application. The last of previous studies from the journal Eka Wahyuningtyas and Dede Nurdiawat research conducted with the title "The Effectiveness of Memrise Application Toward Students' Listening Skill of the Second Grade at SMK Yapidi Jayanti". Their research to find out whether Memrise online application is effective or not on vocabulary mastery for students.

Based on the previous studies their research using the Memrise application as a learning media because it can make students study more fun, have a more related condition, and make learning vocabulary easier. Knowing the result of previous studies Memrise application is effective toward vocabulary mastery. The Researchers also want to investigate is the Memrise application toward vocabulary mastery. Based on the explanation of the
research above, the researcher took the research with the title "The Effectiveness of Using Memrise Application Toward Students' Vocabulary Mastery of the First Grade at SMPN 9 Mesuji Raya Palembang in the Pandemic Covid-19".

