## CHAPTER IV

## RESEARCH FINDING AND DISCUSSION

This chapter covers about research findings and discussion that include data of research findings, hypothesis testing, the result of normality and homogeneity testing, and discussion.

## A. The Description of Data

In this chapter, the researcher presented the data on the students' vocabulary mastery between students' taught by using song from JOOX Music Application and those taught by using conventional method. The subjects of the research consisted of two classes, they were VIII B as Experimental class and VIII A as Control class. The purpose of the research was to know the effectiveness of using song from JOOX Music Application on second grade students' vocabulary mastery at MTs Darul Falah. The data were collected from students' score in pre-test and post-test of the two classes. Then, to determine the significance different whether using song from JOOX Music Application was effective or not, the researcher did not use individual scores for comparison. But, it used the results of class scores or mean of the scores in vocabulary. The data were presented as follow:

## 1. The Data of Experimental Class

The table bellow showed the students' score of pre-test and posttest of Experimental class that consisted of 29 students' of second grade of MTs Darul Falah. The test was multiple choices consisted of 20 items
about part of speech. Students' score of pre-test and post-test can be seen on Table 4.1 as follows:

Table 4.1 The Students' Scores of Experimental Class (Using song from JOOX Music Application)

| No. | Students' Name | Pre-test | Post-test |
| :---: | :---: | :---: | :---: |
| 1. | AHN | 55 | 80 |
| 2. | DC | 60 | 80 |
| 3. | DIN | 90 | 90 |
| 4. | SA | 90 | 95 |
| 5. | MMM | 50 | 75 |
| 6. | DNR | 50 | 70 |
| 7. | DM | 55 | 65 |
| 8. | SF | 55 | 90 |
| 9. | MDCA | 60 | 90 |
| 10. | FA | 55 | 80 |
| 11. | FNA | 55 | 95 |
| 12. | APN | 55 | 95 |
| 13. | ANA | 65 | 60 |
| 14. | SNM | 75 | 85 |
| 15. | EPN | 75 | 95 |
| 16. | MW | 45 | 60 |
| 17. | DPA | 40 | 85 |
| 18. | MN | 45 | 85 |
| 19. | AUNA | 80 | 60 |
| 20. | MZR | 75 | 85 |
| 21. | MIF | 55 | 75 |
| 22. | MZA | 75 | 60 |
| 23. | MF | 70 | 60 |
| 24. | MA | 70 | 55 |
| 25. | MRI | 70 | 75 |
| 26. | MB | 75 | 80 |
| 27. | ANM | 70 | 80 |
| 28. | ATW | 75 | 80 |
| 29. | MR | 60 | 80 |

As stated above, the table showed the students' individual scores. In this research the researcher did not use individual scores for comparison the result, but used the results of class scores or mean of the scores in vocabulary. To know the result of class scores in pre-test the researcher used SPSS 16.0 for windows to know the students' vocabulary achievement at Expeimental class, especially in their basic vocabulary. The result can be seen on the Table 4.2 below:

Table 4.2 Descriptive Statistic Pre-test of Experimental Class

## Statistics

Pretest

| N | Valid | 29 |
| :--- | :--- | ---: |
|  | Missing | 0 |
| Mean |  | 63.7931 |
| Median |  | 60.0000 |
| Mode | 55.00 |  |
| Std. Deviation |  | 1.30695 |
| Minimum |  | 40.00 |
| Maximum |  | 90.00 |
| Sum | 1850.00 |  |

According to the result of pre-test from the table above, it shown that the sum of data was 1850 . The lowest score of pre-test was 40 and the highest score was 90 . The mean of data was 63.79 . And after the
researcher gave the treatment by using song from JOOX Music Application in teaching vocabulary for two weeks, the researcher gave the students post-test scores. The data in the post-test showed on the Table 4.3 below:

Table 4.3 Descriptive Statistic Post-test of Experimental Class

## Statistics

Posttest

| N Valid | 29 |
| :--- | ---: |
| Missing | 0 |
| Mean | 78.1034 |
| Median | 80.0000 |
| Mode | 80.00 |
| Std. Deviation | 1.22776 |
| Minimum | 55.00 |
| Maximum | 95.00 |
| Sum | 2265.00 |

According to the result of post-test from the table above, it shown that the sum of data was 2265 . The lowest score of post-test was 55 and the highest score was 95 . The mean of data was 78.10.

Based on descriptive statistic pre-test and post-test of Experimental class, it shown the Sum of data pre-test was 1850 and the Sum of data post-test was 2265. Mean of pre-test score was 63.79 and the Mean of post-test score was 78.10 . Then, it can be concluded that the
gained score between pre-test and post-test was 415 and the gained of mean score was 14.31 .

## 2. The Data of Controlled Class

The table below showed the students' score of pre-test and posttest of Control class that consisted of 28 students' on second grade of MTs Darul Falah. The test was multiple choices consisted 20 items about part of speech. Students' score of pre-test and post-test can be seen on Table 4.4 as follow:

Table 4.4 The Students' Scores of Controlled Class (Without Using

## Song from JOOX Music Application)

| No. | Students' Name | Pre-test | Post-test |
| :---: | :---: | :---: | :---: |
| 1. | ARF | 40 | 40 |
| 2. | AD | 50 | 30 |
| 3. | AM | 40 | 60 |
| 4. | AIN | 60 | 45 |
| 5. | SN | 40 | 60 |
| 6. | WIP | 20 | 20 |
| 7. | IM | 20 | 20 |
| 8. | MRS | 25 | 35 |
| 9. | MIA | 25 | 30 |
| 10. | MWY | 65 | 30 |
| 11. | MIF | 70 | 80 |
| 12. | MS | 40 | 35 |
| 13. | MRA | 55 | 80 |
| 14. | MKH | 60 | 75 |
| 15. | MRA | 45 | 35 |
| 16. | AB | 40 | 20 |
| 17. | MMZ | 70 | 55 |
| 18. | NA | 65 | 65 |
| 19. | MLA | 55 | 30 |
| 20. | RBS | 75 | 55 |
| 21. | MAA | 45 | 50 |
| 22. | AJI | 35 | 40 |
| 23. | RNP | 40 | 75 |
| 24. | NP | 40 | 65 |
| 25. | BDLA | 65 | 70 |


| 26. | SM | 55 | 60 |
| :---: | :---: | :---: | :---: |
| 27. | FSR | 70 | 65 |
| 28. | DTB | 75 | 80 |

As stated above, the table showed the students' individual scores. In this research the researcher did not use individual scores for comparison the result, but used the results of class scores or mean of the scores in vocabulary. To know the results of class score in pre-test the researcher used SPSS 16.0 for windows to know the students' vocabulary achievement at Control class. The result can be seen on the Table 4.5 below:

Table 4.5 Descriptive Statistic Pre-test of Controlled Class

Statistics
Pretest

| N Valid | 28 |
| :---: | :---: |
| Missing | 0 |
| Mean | 49.4643 |
| Median | 47.5000 |
| Mode | 40.00 |
| Std. Deviation | 1.65741 |
| Minimum | 20.00 |
| Maximum | 75.00 |
| Sum | 1385.00 |

According to te result of pre-test from the table above, it shown that the sum of data was 1385 . The lowest score of pre-test was 20 and the highest score was 75 . The mean of data was 49.46 . And after the researcher teaching vocabulary using conventional method, the researcher gave the students post-tes scores. The data in the post-test were showed on the Table 4.6 below.

### 4.6 Descriptive Statistic Post-test of Controlled Class

Statistics

Posttest

| N Valid | 28 |
| :---: | :---: |
| Missing | 0 |
| Mean | 50.1786 |
| Median | 52.5000 |
| Mode | 30.00 |
| Std. Deviation | 1.97897 |
| Minimum | 20.00 |
| Maximum | 80.00 |
| Sum | 1405.00 |

According to the result of post-test from the table above, it shown that the sum of data was 1405 . The lowest score of post-test was 20 and the highest score was 80 . The mean of data was 50.17 .

Based on descriptive statistic pre-test and post-test of Control class, it shown the Sum of data pre-tet was 1385 and the Sum of data post-test was 1405. Mean of pre-test score was 49.46 and the Mean of post-test score was 50.17 . Then, it can be conclude that the gained score between pre-test and post-test was 20 and the gained of mean score was 0.71 .

## B. The Result of Normality and Homogeneity Testing

## 1. The Result of Normality Testing

Normality testing is conducted to determine whether the gained data was normal distribution or not. The researcher used SPSS 16.0 OneSample Kolmogorov-Smirnove test by the value of significance $(\alpha)=$ 0.050 . The result can be seen in table below:

Table 4.7 Normality Testing

One-Sample Kolmogorov-Smirnov Test

|  |  | Pretest | Posttest | Unstandardized Residual |
| :---: | :---: | :---: | :---: | :---: |
| N |  | 29 | 29 | 29 |
| Normal Parameters ${ }^{\text {a }}$ | Mean | 63.79 | 78.10 | . 0000000 |
|  | Std. <br> Devi <br> ation | 13.070 | 12.278 | 13.05544070 |
| Most Extreme Differences | Abso <br> lute | . 163 | . 182 | . 147 |
|  | Positi ve | . 163 | . 137 | . 147 |


| Nega <br> tive |
| :--- |
| Kolmogorov-Smirnov Z |

Asymp. Sig. (2-tailed)
a. $\quad \mathrm{H}_{0}$ : Data is in normal distribution
b. $\quad \mathrm{H}_{1}$ : Data is not in normal distribution

The standard significant of education is $0.05(\alpha=5 \%)$. To determine data was normal distribution or not it can be seen from the result of data normality testing. Based on the output from SPSS above is known that the significance value from pre-test was 0.879 and from the post-test was 0.980 . Both value from pre-test and post-test were bigger than 0.05 .

The sig/p value on pre-test is 0.879 and it is bigger than 0.05 ( $0.879>0.05$ ).it means that $\mathrm{H}_{0}$ is accepted and $\mathrm{H}_{1}$ rejected, so the data is in normal distribution. Then, for post-test score value of sig/p is 0.980 and that is bigger than $0.05(0.980>0.05)$. It also means that $\mathrm{H}_{0}$ is accepted and $\mathrm{H}_{1}$ is rejected and the data is in normal distribution. Thus, it can be interpreted that both of data (pre-test and post-test score) are in normal distribution.

## 2. The Result of Homogeneity Testing

Homogeneity testing is conducted to know whether the gained data has a homogeneous variance or not. To know the homogeneity, the researcher used Test of Homogeneity of Variances with SPSS 16.0 by the value of significance $(\alpha)=0.050$. The result can be seen below:

Table 4.8 Homogeneity Testing

## Test of Homogeneity of Variances

Pretest

| Levene <br> Statistic | df1 | df2 | Sig. |
| :--- | :--- | :--- | :--- |
| 2.036 |  | 5 | 20 |

a. $\quad \mathrm{H}_{0}$ : Data is homogeny
b. $\quad \mathrm{H}_{1}$ : Data is not homogeny

The standard significant of education is $0.05(\alpha=5 \%)$. Based on the output from SPSS above is known that the test called homogeny if the significant score more than 0.05 . According to the table above, the test is homogen because $0.117>0.05$ and it means that $\mathrm{H}_{0}$ is accepted and $\mathrm{H}_{1}$ is rejected. So, it can be conclude that students' of VIII B has homogeny of variances.

## C. Hypothesis Testing

The hypothesis testing of this study as follow:

1. $\mathrm{H}_{0}$ (null hypothesis): There is no significant difference score in vocabulary of the students taught by using song from JOOX Music

Application and those taught by using conventional method at the second grades of MTs Darul Falah.
2. Ha (alternative hypothesis): There is significant difference score in vocabulary of the students taught by using song from JOOX Music Application and those taught by using conventional method at the second grades of MTs Darul Falah.

The hypothesis testing of this study followed the rule as follows:

1. If the significant value is less than 0.05 , the null hypothesis $\left(\mathrm{H}_{0}\right)$ is rejected and alternative hypothesis (Ha) accepted.
2. If the significant value is more than 0.05 , the alternative hypothesis (Ha) is rejected and null hypothesis $\left(\mathrm{H}_{0}\right)$ is accepted.

To know whether there were any significance different students' vocabulary achievement between the students' taught by using song from JOOX Music Application and those taught by using conventional method, the calculating result should show whether $\mathrm{H}_{0}$ is rejected meanwhile Ha is accepted. To analyzed data the researcher used SPSS 16 for windows, the result can be seen on Table 4.7 below:

Table 4.9 Descriptive Statistic of Post-test in Two Groups

## Descriptive Statistics

|  | N | Minimum | Maximum | Mean | Std. Deviation |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Experimental_class | 29 | 55 | 95 | 78.10 | 12.278 |
| Control_class | 28 | 20 | 80 | 50.18 | 19.790 |
| Valid N (listwise) | 28 |  |  |  |  |

Based on the table above, it showed there were two classes, experimental class and control class. Experimental class showed there were 29 students', Mean of score experimental class was 78.10, Standard Deviation for experimental classs was 12.278. Meanwhile, in the control class, showed there were 28 students', Meanof score control class was 50.18, Standard Deviation for control class was 19.790.

In addition, to know the significance different score in Experimental and Control class, while used descriptive statistics the researcher also used independent sample T-test. The purpose was to know the effectiveness of song from JOOX Music Application in vocabulary mastery. To analyzed the result of t -test testing the researcher used SPSS 16.0 for windows. The resultcan be seen on Table 4.8 as follow:

Table 4.10 Independent Sample T-test

## Independent Sample t-Test



The table of Independent Sample Test showed that the significant value (sig-2 tailed) was 0.000 . According to the hypothesis testing rule, if the significant value is less than 0,05 , the null hypothesis $\left(\mathrm{H}_{0}\right)$ is rejected and alternative hypothesis (Ha) accepted. And if the significant value is more than 0.05 , the alternative hypothesis $(\mathrm{Ha})$ is rejected and null hypothesis $\left(\mathrm{H}_{0}\right)$ is accepted. The significant value (sig-2 tailed) was 0.000 and it was smaller than $0.05(0.00<0.05)$ it means that $\mathrm{H}_{0}$ was rejected and Ha was accepted.

Thus, it can be interpreted that there was significant difference score in vocabulary of the students' taught by using song from JOOX Music Application and those taught by using conventional method. It means that using song from JOOX Music Application was improve the students' vocabulary.

## D. Discussion

From the research finding above, the data were analyzed with SPSS 16.0 for windows. The students' who were taught by using song from JOOX Music Application made significant improvement, as seen from the mean score of pre-test was 63.79 and the mean score of post-test was 78.10 . The gained of the mean score of experimental class between pre-test and post-test was 14.31. Meanwhile, the students' who were taught by using conventional method did not make significant improvement, as seen from the mean score of pre-test was 49.46, and the mean score of post-test was 50.17 . The gained of the mean score of control class between pre-test and post-test was 0.71 . Based on the gained score between experimental class and control class, there are significance difference. The gained score of experimental class was 14.31 and the gained score of control class was 0.71 . It can be concluded that the gained score of experimental class was higher than control class.

From the explanation above, experimental class has better vocabulary achievement than control class on post-test. Since the research used homogeneous selection to control extraneous variable and the result of homogeneity testing on students' pre-test on previous chapter showed that the
students' have homogenous ability on vocabulary mastery. It can be concluded that song from JOOX Music Application was effective and not affected by extraneous variable.

Based on the research at MTs Darul Falah, it can be inferenced that teaching vocabulary by using song from JOOX Music Application was better than without using song from JOOX Music Application. Furthermore, the students' who learned vocabulary mastery through song from JOOX Music Application and who taught without song from JOOX having such a significant difference that the students' vocabulary scores who were taught by using song from JOOX Music Application was higher than those who were not. It can also be concluded that using song from JOOX Music Application was effective to teaching vocabulary.

Song as media can help students' in changed the different atmosphere when learning activity. It based on theory of Dale (1992:5) that stated as a teaching media, song prevents students' boredom in language classroom. The use of song in teaching learning process has good implication such as create a welcoming atmosphere, reduce learning stress level, and connect students' to content topics. Then, by using song from JOOX Music Application, the students' will be more practical to used and enjoy because they can used their own smartphhone. Moreover, According to Asnawir and Usman teaching media classified in three kinds, they are visual aids, audio aids, and audio visual aids. The JOOX music Application is included in audio aids which served there are many kinds genre of music especially English song. By

English song, the students' can get many new vocabularies from the application. Because, the application is complete with lyrics so the students' can listening while read the lyrics. By using this application, the students' would be easy to learned.

Briefly, the vocabulary achievement in the experimental class has proven that song from JOOX Music Application is effective on students' vocabulary mastery. The finding of the present research confirms the findings of the preceding studies. The previous study written by Fadrulrohman (2017), found that listening English song can improve students' vocabulary not only on their academic score but also on their behavior to the lesson. Another study is conducted by Ria (2016), found that using song was effective to improve students' English vocabulary. There were improvement in the students' participation in introduction, discussion and practice. Moreover, the students' were interest in communicative and active since the use of song as media in teaching vocabulary. Furthermore, Kustiana (2009) in her study also proved that song gave contribution in teaching vocabulary. Song can motivate the students to learn more about vocabulary. So, the students' were able to increase their vocabulary.

In inference to the findings and previous study above, the use of song especially from JOOX Music Application was successfull to improve the students' vocabulary mastery. Song provides many opportunities for students' to add their vocabulary. The activities also increased the students' motivation and create a relax atmosphere, so the students' did not get bored. Therefore,
as song from JOOX Music Application is effective, the English teacher is suggested to be used as one of alternative media.

