

CHAPTER IV

RESEARCH FINDING AND DISCUSSION

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

A. The Data of Research Findings

The data obtained from the students' vocabulary mastery between students' taught using song from the JOOX Music Application and those acquired using conventional method is presented by the researcher in this chapter. Researcher conducted research in the twelfth grade at SMKN 3 Boyolangu Tulungagung with the research subjects consisted of XII TEI 3 as experimental group and XII TEI 2 as control group. The research aimed to determine the effectiveness of using song from JOOX Music Application on students' vocabulary mastery of the twelfth grade at SMKN 3 Boyolangu Tulungagung. The data of this study were collected from the post-test scores of two classes. It can be emphasized that in this study the pre-test was only used to measure students' basic vocabulary abilities, not to compare their effectiveness. The researcher gave 10 multiple choice questions for pre-test with time allocation 20 minutes, the researcher do the same format at post-test. The tests for two classes has been tested for reliability and validity in other classes. Then, to determine the difference in significance whether the use of song from JOOX Music

Application was effective or not, the researcher did not only compared the individual scores in post-test but also used the class score results or mean of the vocabulary scores. The data were presented as follows:

1. The Data of Experimental Class

The experimental class consisted of 34 students of XII TEI 3 SMKN 3 Boyolangu. This data below is the results of pre-test and post-test was conducted in this class. It can be seen in the table 4.1 below:

Table 4.1

The students' scores of Experimental Class (taught using song from JOOX Music Application)

No.	Student's Name	Pre-test	Post-test
1	MOP	40	60
2	MRK	40	100
3	MRS	80	100
4	MSAR	80	80
5	MTAS	40	90
6	MTF	70	90
7	MWA	50	90
8	NA	60	80
9	NSA	80	100
10	NFA	50	80
11	NSM	50	100
12	RRQ	70	90
13	RBP	70	100
14	RP	50	90
15	RE	60	70

16	RAL	50	70
17	RK	50	70
18	RFP	40	70
19	RAS	60	100
20	RPH	60	70
21	RRS	60	90
22	SASI	40	80
23	SDS	70	100
24	SSA	40	100
25	SHW	40	80
26	SWS	90	100
27	TRZ	40	70
28	TDP	30	70
29	VCR	90	90
30	YF	30	100
31	YRD	50	90
32	YEF	30	60
33	YKP	70	90
34	YRA	60	100

The table above shows the individual student scores of experimental group which taught by JOOX. To find out the results of the pre-test, the researcher used the SPSS 16.0 program for windows. The results of the pre-test scores can be seen in table 4.2:

Table 4.2**Descriptive Statistic Pre-test of Experimental Class****Descriptive Statistics**

	N	Minimum	Maximum	Sum	Mean	Std. Deviation
Pre-Test Experimental	34	30	90	1890	55.59	16.911
Valid N (listwise)	34					

The table shows the results of pre-test experimental class. It shows the lowest pre-test score was 30 and maximum was 90. The sum of data was 1890. The mean was 55.9. After the researcher gave treatment by using song from JOOX Music Application in teaching vocabulary mastery, the researcher administered a post-test. The data in the post-test are presented in the table 4.3:

Table 4.3**Descriptive Statistic Post-test of Experimental Class****Descriptive Statistics**

	N	Minimum	Maximum	Sum	Mean	Std. Deviation
Post-Test Experimental	34	60	100	2920	85.88	13.054
Valid N (listwise)	34					

The table shows the results of post-test experimental class. It shows the lowest post-test score was 60 and maximum was 100. The sum of data was 2920. The mean was 85.88. The gained score between both test was 1030, and mean score was 30.29. It can be concluded that the students' scores increase significantly after given treatment.

2. The Data of Control Class

The control class consisted of 34 students of XII TEI 2 SMKN 3 Boyolangu. This data below is the results of pre-test and post-test was conducted in this class. It can be seen in the table 4.4 below:

Table 4.4

The students' scores of Control Class (Without using song from JOOX Music Application)

No.	Student's Name	Pre-test	Post-test
1	EPS	80	80
2	EPA	70	80
3	EAKJ	80	80
4	FPI	80	50
5	FZ	70	80
6	FAM	60	50
7	FK	50	50
8	FYE	80	80
9	GB	30	50
10	GP	30	70
11	HNA	40	40
12	HYR	30	80
13	HWS	30	80

14	ISA	70	80
15	IAM	40	70
16	IMS	30	50
17	JTA	50	80
18	JDP	80	40
19	JP	80	50
20	JFP	20	40
21	KM	40	60
22	MDP	30	60
23	MSY	50	70
24	MNM	50	80
25	MR	60	50
26	MAR	80	60
27	MAP	50	50
28	MAZ	80	80
29	MANE	60	80
30	MCH	70	70
31	MFA	60	80
32	MFZ	60	70
33	MJ	40	80
34	MKR	40	80

The table above shows the individual student scores of control group which taught by conventional method. To find out the results of the pre-test, the researcher used the SPSS 16.0 program for windows. The results of the pre-test scores can be seen in table 4.5:

Table 4.5**Descriptive Statistic Pre-test of Control Class****Descriptive Statistics**

	N	Minimum	Maximum	Sum	Mean	Std. Deviation
Pre-test Control	34	20	80	1870	55.00	19.267
Valid N (listwise)	34					

The table shows the results of pre-test control class. It shows the lowest pre-test score was 20 and maximum was 80. The sum of data was 1870. The mean was 55.0. After the researcher gave treatment by using conventional method in teaching vocabulary mastery, the researcher administered a post-test. The data in the post-test are presented in the table 4.6:

Table 4.6**Descriptive Statistic Post-test of Control Class****Descriptive Statistics**

	N	Minimum	Maximum	Sum	Mean	Std. Deviation
Post-test Control	34	40	80	2250	66.18	14.774
Valid N (listwise)	34					

The table shows the results of post-test control class. It shows the lowest post-test score was 40 and maximum was 80. The sum of data was 2920. The mean was 85.88. The data score gained between pre-test and post-test was 380 and the gained mean score was 11.18.

B. The Result of Normality and Homogeneity Testing

1. The Result of Normality Testing

Normality testing required as an assumption or condition for each parametric test and also used to measure whether the obtained data is a normally distributed and can be used in parametric statistics or not. Kolmogorov-Sminorv used to determining data normality using SPSS 16.0 by the value of significance 0.05.

Table 4.7

The Result of Normality Testing

One-Sample Kolmogorov-Smirnov Test

	pre_test	post_test	Unstandardized Residual
N	34	34	34
Normal Parameters ^a Mean	55.59	85.88	.0000000
Std. Deviation	16.912	13.054	11.82817642
Most Extreme Differences Absolute	.159	.212	.104
Positive	.159	.153	.085
Negative	-.097	-.212	-.104
Kolmogorov-Smirnov Z	.926	1.236	.607
Asymp. Sig. (2-tailed)	.357	.094	.855

a. Test distribution is Normal.

- a. H_0 : the data are distributed normally.
- b. H_a : the data are not distributed normally.

To find out the data is normally distributed or not can be seen from the results of normality test data. It can be seen from the data above that significance of pre-test was 0.357 and the post-test is 0.094. the values of the pre-test and post-test were more than 0.05. The sig/p value on pre-test is 0.357 and its greater than 0.05 ($0.357 > 0.05$). The data is normally distributed because H_0 is accepted and H_a is rejected. And for post-test score value sig/p is 0.094 and that is more than 0.05 ($0.094 > 0.05$). The data is normally distributed because known the H_0 is accepted and H_a is rejected.

2. The Result of Homogeneity Testing

Homogeneity testing is a test of the difference between two or more groups. All group characteristic can vary from one to another. This test used to measure whether the data has variants which homogeneous or not. Researcher used T-test to determine the homogeneity of variances with SPSS 16.0 program by the value of significance (α) = 0.050.

Table 4.8**The Result of Homogeneity Testing****Test of Homogeneity of Variances**

The result

Levene Statistic	df1	df2	Sig.
1.852	1	66	.178

- a. H_0 : data distribution is homogeneous
- b. H_a : data distribution is not homogeneous

As seen on the table, significance value for all data on homogeneity test was 0.178, its larger than 0.05. So, this data can concluded as homogeneity testing because the variance of the post-test data from two groups has homogeneous distribution data.

C. Hypothesis Testing

The hypothesis testing used *Independent Sample T-Test* by using SPSS 16.0 as follows:

1. H_0 (null hypothesis): There is no significant difference in the average score of students who are taught vocabulary by using song from JOOX Music Application and review taught using conventional method in the twelfth grade at SMKN 3 Boyolangu Tulungagung
2. H_a (alternative hypothesis): There is significant difference in the average score of students who are taught vocabulary by using song

from JOOX Music Application and review taught using conventional method in the twelfth grade at SMKN 3 Boyolangu Tulungagung

Table 4.9

Descriptive Statistic of Post-test in Two Groups

Descriptive Statistics

	N	Minimum	Maximum	Sum	Mean	Std. Deviation
Experimental Class	34	60	100	2920	85.88	13.054
Control Class	34	30	90	1890	55.59	16.912
Valid N (listwise)	34					

The researcher used SPSS 16.0 program to analyze data. As seen on the table, Experimental class has 34 students', which the mean of Experimental class score was 85.88 and standard deviation was 13.054. Meanwhile, the Control class has 34 students', mean of score Control class was 55.59 and standard deviation was 16.912. Apart from using descriptive statistics, researchers also used the independent sample t-test. The goal of using independent sample t-test is to determine the effectiveness of the JOOX Music Application in mastering vocabulary. Before calculating the t-test, the homogeneity test was carried out. To analyze the results of the t-test, researcher used SPSS 16.0 for windows. The results can be seen below:

Table 4.10**The result of Independent Sample T-test****Independent Samples Test**

	Levene's Test for Equality of Variances		t-test for Equality of Means							
	F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
								Lower	Upper	
Result of post-test	1.852	.178	5.828	66	.000	19.706	3.381	12.955	26.456	
Equal variances assumed										
Equal variances not assumed			5.828	65.014	.000	19.706	3.381	12.953	26.458	

According to hypothesis testing rules, if the significant value is less than 0.05, the null hypothesis (H_0) is rejected and alternative hypothesis (H_a) accepted. If the significant value is more than 0.05, the alternative hypothesis (H_a) is rejected and null hypothesis (H_0) is accepted. As seen on the column T-test from table above, the significant value (sig-2 tailed) was 0.000 and it was smaller than 0.05 ($0.00 < 0.05$). As the basis for making t-test decision, it means that the null hypothesis was rejected and alternative hypothesis was accepted. It can conclude that there was significant difference mean score from students' vocabulary whose taught by using song from JOOX Music Application and those taught by using

conventional method. It means that JOOX Music Application was effective to teach the students' vocabulary mastery.

D. Discussion

The objective of this research was to investigate the effectiveness of using song from JOOX Music Application of the students' vocabulary mastery of the twelfth grade at SMKN 3 Boyolangu Tulungagung.

As seen on the research finding, the researcher analyzed the data with SPSS 16.0 for windows. Experimentall class students experienced a significant improvement from the mean of pre-test score was 55.59 and the post-test score was 85.88. The average acquisition of pre-test and post-test was 30.29. Meanwhile, the control class students experienced and increase but its not significantly, this can be seen from the mean score of pre-test was 55.0 and the post-test score was 66.18. The average score of the control class between pre-test and post-test was 11.18. Based on the value obtained between experimental class and control class, there are significant differences. The obtained value from experimental class was 30.29 and the gained of control class was 11.18. It can be concluded that the value obtained by the experimental class was higher than control class. It can be concluded that song from JOOX Music Application was effective and not influenced by foreign variables. The test result of homogeneity on previous chapter showed that the students' have homogenous ability on vocabulary mastery, so it can conclude that JOOX Music Application was effective and not influenced by foreign variables.

Based on the research at SMKN 3 Boyolangu Tulungagung, it can be inferred that teaching vocabulary by using song from JOOX Music Application was better than using conventional method. The students' who learned vocabulary mastery with song from JOOX Music Application and who learned with conventional method having a significant difference on score. Students who learned vocabulary mastery using song from JOOX Music Application has higher score than student who were not. It can be concluded that using song from JOOX Music Application was effective to teaching vocabulary mastery.

Siti Tarwiyah (2008) stated one of the learning media that can be used to teach vocabulary is song, its making students more relaxed in learning foreign languages. Songs are very useful and important because the classroom will turn out to be fun and more colorful if right chosen. As a media, songs can help teachers to create fun classes and increase the students' creativity in teaching vocabulary and students' can explore the world with a song. Students will be more practical to used and enjoy JOOX because they can used their own smartphone to opened the application. Teaching media divided into three kind; visual aids, audio aids, and audio visual aids. JOOX Music Application is included in audio aids which served lyrics and kinds genres of music, especially English song. By listening English song and understanding the lyrics, the students can get many new vocabularies.

This study aimed to ensure that is it effective to mastering vocabulary using song from JOOX Music Application as a media. Therefore, the researcher looked for some research concerning those media, there are: the first previous study has been written by Prames Ayunimas, entitled "*Improving Vocabulary Mastery through listening to Songs for The Students of SMKN 2 Depok Sleman Jogjakarta*" from English Language education Study Program Sanata Dharma University Yogyakarta. This thesis used descriptive qualitative research method. The researcher also conducted a students observation to determine the implemented of songs. Second previous study has been conducted by Ahmad Sauki Puttaki Bahri 2018 "*The Effectiveness of Using Song Lyric Toward Students' Vocabulary Mastery at the Eight Grade of MTs N Muara Bungo In the Academic year 2016/2017*" from English Education Program, Faculty of Education and Teacher Training, Islamic State University Sulthan Thaha Saifuddin Jambi. He used quantitative research approach with experimental research design with SPSS 24.0 program to calculate the data. The last previous study has been written by Fika Sari Robiatussolikah, entitled "*The Effectiveness of Song from JOOX Music Application on Students Vocabulary Mastery of Second Grade at MTs Darul Falah*" from English Department of State Islamic Institute (IAIN) Tulungagung. This study used quantitative approach. This research aimed to discover the mastery of students' vocabulary that improves by using a

song from JOOX Music Application. The subject of this research was MTs Darul Falah's second grade students.

In the conclusion of the findings and previous research above, JOOX Music Application was successful to improve the students' vocabulary mastery. Song provides many opportunities for students' motivation. Learning with listening relaxing song can make the students more creative and they did not get bored. The English teacher is recommended to used song from JOOX Music Application as one of alternative media to teaching vocabulary mastery. Therefore, using song from JOOX Music Application is not only effective to taught vocabulary mastery on students grade 8, but also effective to taught vocabulary mastery on twelfth grade students at SMKN 3 Boyolangu Tulungagung.