CHAPTER IV

FINDING AND DISCUSSION

4.1 Research Findings

4.1.1 Data Presentation

To find out the differences between students who were taught using the song mnemonic method and students who were not taught using the method recommended by the school, researchers conducted quantitative data analysis. This data was obtained by giving tests to the experimental class and control class after providing different learning methods to the two classes.

Before the researcher determines the sample, the researcher should carry out a normality and homogeneity test by selecting two classes. They are between class VIII 6 (Control Class) and class VIII 2 (Experimental Class) as the sample. This test is carried out to determine whether the sample is homogeneous or not. After testing, data analysis was carried out to determine the homogeneity of the sample. Data Analysis of Pretest Scores for Experimental Class and Control Class.

Table 4.1 Score of Pre-test & Post-test Contol Class

No	Student	Control Class	
		Pre-test	Post-test
1	Aini Putri Nursila	20	55
2	Aisyah Nur Annisa	40	65
3	Anas Fata Habib Nst	15	50
4	Annisa Fitri Assyifa	55	70
5	Arya Pratama Sinaga	20	50
6	Danish Haflyzi Sitorus	15	50
7	Gizka Amelka	35	78
8	Harsysy Suhaila	50	75

9	Jahira Nurpatia	40	70
10	Jaya Turangga	15	60
11	Kasih Revani	15	50
12	M. Rafi Al-fathir	15	50
13	M. Alvi Syahri	15	85
14	M. Rayhan Additia	10	50
15	M. Fahri	15	50
16	Maulida Hariyanti	40	15
17	M. Akram Iftikhar	15	80
18	Muhammad Rizky Manurung	15	60
19	Nadira Rizaelia	65	86
20	Naila Afifa	50	76
21	Raisya Maulida	20	50
22	Rifani Lubis	55	78
23	Rizky Tanwira	65	85
24	Saydha Sufiyah Lubis	45	85
25	Siti Khumairah	50	60
26	Sultan Daffa Abdullah	40	60
27	Sunaina Aulia Fitri	40	50
	Mean Rank	17,07	37,93
	Sum Of Ranks	461,00	1024,00

Table 4.2 Score of Pre-test & Post-test Eksperimen Class

No	**Student**	**Eksperimen Class**	
		Pre-test	**Post-test**
1	Adamul Awwalin	25	75
2	Aidil Akbar	25	60
3	Aisyah Bahri	70	75

4	Asri Purnama	45	55
5	Atiqah Azzahra	50	65
6	Aufa Qonita	60	80
7	Aulia Syahputri	25	50
8	Azura Naina	20	60
9	Aulia Citra	30	75
10	Dita Syahbila	70	90
11	Diva Olivia	30	75
12	Fara Humaira	50	85
13	Fathan Affandi	40	90
14	Keisya Aulia	45	90
15	Khairiy Hamdi	50	75
16	Muhammad Daffa	45	70
17	Muhammad Fitho	25	60
18	Muhammad Rafif Naufal	35	60
19	Muhammad rafif Rabbani	50	85
20	Muliadi Syahdan	40	70
21	Nasila Aufa	50	95
22	Naufal Tabriz	50	90
23	Nazwa Ayatillah	65	95
24	Nurdiansyah	40	70
25	Siti Azzura	40	80
26	Syahril Pratama	20	55
27	Syuri Rahmadani	20	65
	Mean	41,2963	72,2222
	Std. Deviation	14,90951	14,76309
	Std. Error Mean	2,86934	2,84116

4.1.2 Data Analysis

4.1.2.1 Normality Test

The normality test is calculated using the Kolmogorov-Smirnov test to determine whether the data from each variable is normal or not. The data calculation table is presented below:

Table 4.3 Normality test of Control Class

Test Of Normality							
	Control Class	Kolmogorov-Smirnov			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Hasil_Control	Pre-test Control	,239	27	,000	,865	27	,002
	Post-test Control	,183	27	,020	,891	27	,008
a. Lilliefors Significance Correction							

a. The test distribution is not normal

b. Calculated from the data

c. Lilliefors significance correction

Diagram Normality Of Pre-test Control Class

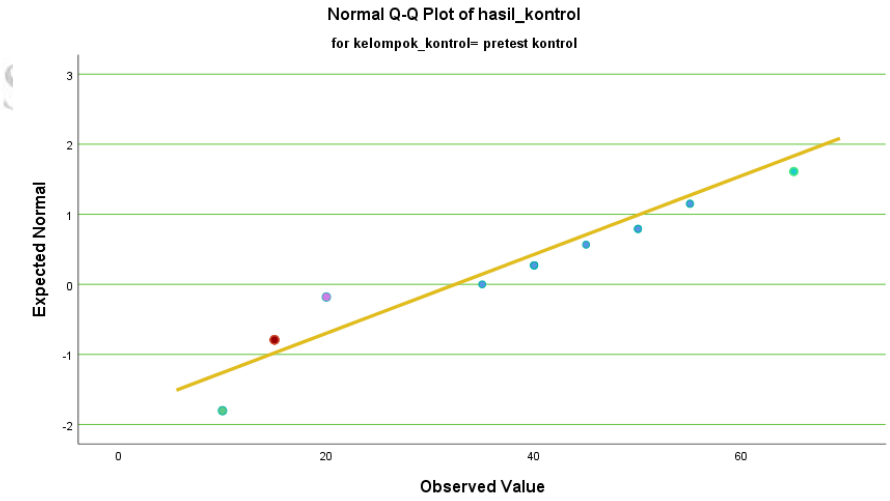
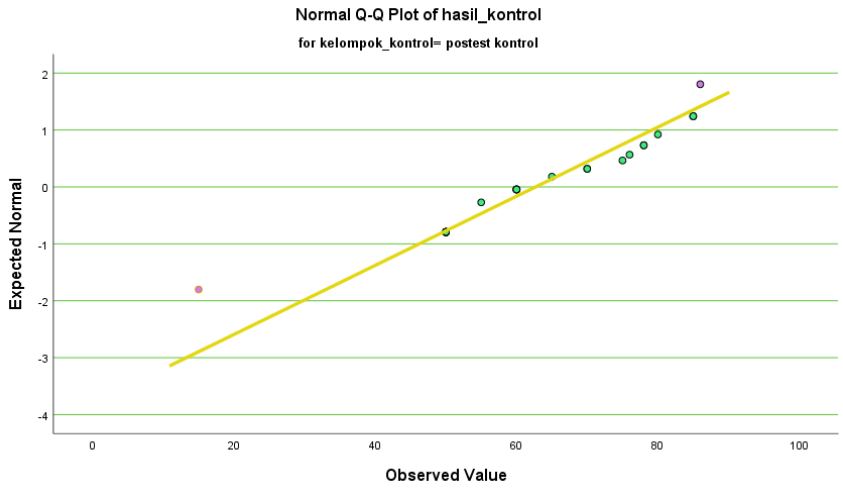


Diagram Normality Of Post-test Control Class



Based on the table above shows that sig. control class in the pre-test is 0.000. It can be concluded that this research data is not normal because the value is lower than 0.05 (0.000<0.05). The results of the post-test from the research data are normal with sig. 0.020 because the value is higher than 0.05 (0.020>0.05).

Table 4.4 Normality test of Experimen Class

Test Of Normality							
	Experimen Class	Kolmogorov-Smirnov			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Hasil_Experimen	Pre-test Experimen	,132	27	,200	,937	27	,103
	Post-test Experimen	,167	27	,053	,943	27	,148

*. This is a lower bound of the true significance
a. Lilliefors Significance Correction

a. Normal test distribution

b. Calculated from data

c. Lilliefors significance correction

d. This is the lower limit of the true meaning

Diagram Normality Of Pre-test Eksperimen Class

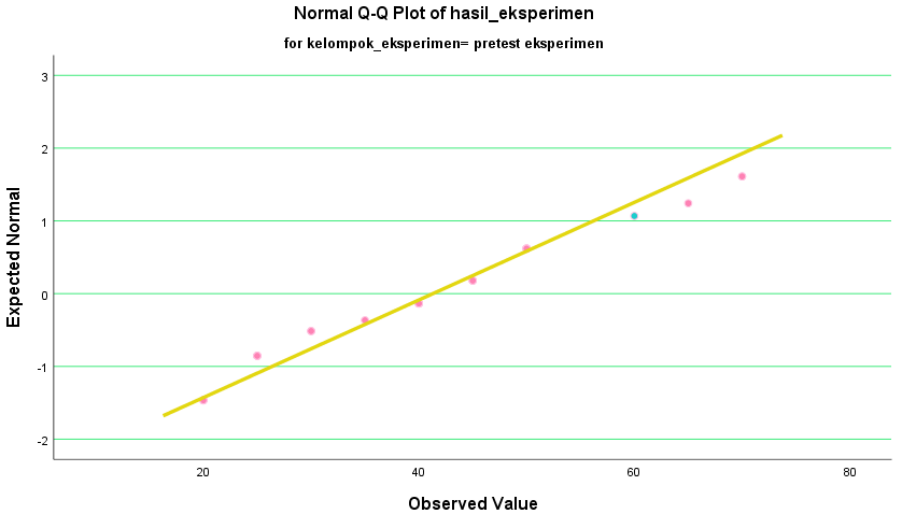
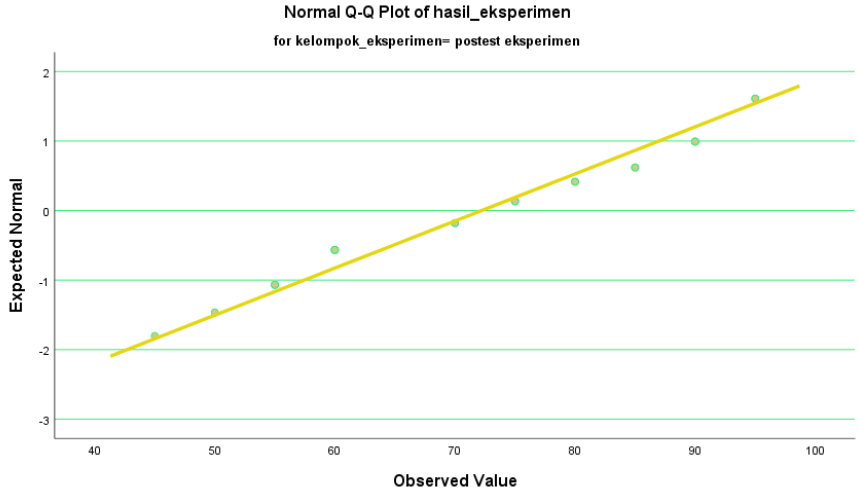


Diagram Normality Of Post-test Eksperimen Class



Based on the table above, it shows that sig. experimental class on the pre-test was 0.200. It can be concluded that this research data is normal because the value is higher than 0.05 (0.200>0.05). Post test results from research data are normal with sig. 0.053 because the value is higher than 0.05 (0.053>0.05).

4.1.2.2 Homogeneity Test

The homogeneity test is carried out to find out whether the data for the two classes have the same or different variants. In quasi-experimental research, homogeneity is used to determine whether the experimental and control classes taken from the population have the same variance or not. In this research, researchers collected data using SPSS Version 27

Table 4.5 Homogeneity test of Control Class

Test of Homogeneity of Variances					
		Levene Statistic	df1	df2	Sig.
Hasil_Control	Based on Mean	1,400	1	52	,242
	Based on Median	1,362	1	52	,249
	Based on Median and with adjusted df	1,3621	1	48,718	,249
	Based on trimmed mean	1,346	1	52	,251

Based on the table above, the researcher calcluted that the data was homogeneity distributed because the value of a statistic is higher (0.251>0.05).

Table 4.6 Homogeneity test of Experimen Class

Test of Homogeneity of Variances					
		Levene Statistic	df1	df2	Sig.
Hasil_Experimen	Based on Mean	,039	1	52	,845
	Based on Median	,027	1	52	,871
	Based on Median and with adjusted df	,027	1	51,851	,871
	Based on trimmed mean	,040	1	52	,842

Based on the table above, the researcher calcluted that the data was homogeneity distributed because the value of a statistic higher (0.842>0.05).

4.1.2.3 Hypothesis Test

After testing of normality and homogeneity test, the researcher tested the hypothesis. The test of homogeneity of Variances Postexper Levene Statistic df1 df2 sig. The researcher used the T-test to analyze the data to eksperimen class and using Mann-Whitney test to control class cause the data is not normal.

Table 4.7 Mann-Whitney test control

Ranks				
Control_Class	Control Group	N	Mean Rank	Sum of Ranks
	Pre-test Control	27	17,07	461,00
	Post-test Control	27	37,93	1024,00
	Total	54		

Test Statistics*	
	Hasil Control
Mann-Whitney U	83,000
Wilcoxon W	461,000
Z	-4,917
Asymp, Sig. (2-tailed)	,000
a.Grouping Variable: Control Group	

Based on the group statistic above, the data showed that the total Control class was 27 students.The mean of pre-test control class was 17,07 and the post-test was 37,93, while it can be concluted that there are differences in the average pre-test and post-test control classes.

Table 4.8 The Mean Score of Eksperimen Class

Group Statistics					
	Eksperimen Group	N	Mean	Std. Deviation	Std. Error Mean
Hasil_Eksperimen	Pre-test Eksperimen	27	41,2963	14,90951	2,86934
	Post-test Eksprimen	27	72,2222	14,76309	2,84116

Based on the group statistic above, the data showed that the total Eksperimen class was 27 students. The mean of pre-test control class was 41,2963 and the post-test was 72,2222, while it can be concluted that there are differences in the average pre-test and post-test eksperimen classes. Furthermore, to prove whether the difference is significant or not, we need to interpret the following output of the "independent sample test".

Table 4.9 The Calculation of T-test Independents Sample 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
Hasil_Eksperimen	Equal variances assumed	,039	,845	7,659	52	,000	30,92593	4,03798	39,02872	22,82313
	Equal variances not assumed			7,659	51,995	,000	30,92593	4,03798	39,02874	22,82311

Based on the result of the table above, it showed that the value of the T-test was 7.659 and degree of freedom (df) was 54 (df-2;54-2=52). The value of T a significant 5% of T-table of db= 2.00. To interpret the data above, the researcher formulated the hypothesis below:

Ha: There are significant differences in vocabulary mastery of the students' who taught by using song mnemonic.

Ho: There are no significant differences in vocabulary mastery of the students' who taught by using song mnemonic.

The result of the research showed that the T-test was 7.659 and the value of T-table of dB=54 is 2.00. It means that the value of the T-test was higher than T table (7.659>2.00). Therefore Ho was rejected and Ha was accepted. It can be concluded that there are was significant difference score in vocabulary mastery for seventh grade students' using song mnemonic.

4.1.2.4 Effect Size

Effect size will be used to assess how strong the effect size is to increase students' vocabulary mastery using song mnemonics. Therefore, researchers use the following Cohen's formulation.

Tabel 4.10 Independent Samples Effect Sizes

Independent Samples Effect Sizes					
		Standardizer	Point Estimate	95% Confidence Interval	
				Lower	Upper
Hasil_Eksperimen	Cohen's d	14,83648	2,084	-2,744	1,411
	Hedges' correction	15,05484	2,054	-2,705	1,391
	Glass's delta	14,76309	2,095	-2,863	1,307

a.The denominator used in estimating the effect sizes. Cohen's d uses the pooled standard deviation. Hedges' correction uses the pooled standard devition, plus a correction factor. Glass's delta uses the sample standard devition of the control group.

Based on the table above, the 27 students analyzed based on the effect size of the 95% confidence interval have a lower limit of -2.705 and a higher limit of 1.391 with an average effect size value of 14.83648 with the highest effect category.

4.1.2.5 The Statistical Hypothesis

This research was conducted to answer the research problem of its usefulness the song mnemonic method has a significant effect on the vocabulary mastery of class VII MTsN Tanjungbalai students. Then, to explain the answer question above, the pre-test and post-test data were calculated using t-test formula (Independent sample t-test) with the following assumptions:

Ha is accepted if t count > t table or if Sig (2-tailed) < 0.05. There is a significant effect of using the song mnemonic method on increasing students' mastery of English vocabulary at MTsN Tanjungbalai. This can be seen from table, the Sig (2-tailed) value is 0.000 < 0.05 which means the Ha hypothesis accepted.

H0 is accepted if t count < t table, or if Sig (2-tailed) > 0.05. There is no significant influence on the use of the song mnemonic method on MTsN Tanjungbalai students' vocabulary mastery. As seen from table, the Sig (2-tailed) value is 0.000 < 0.05, meaning the hypothesis H0 is accepted rejected

4.2 **Discussion**

Based on student data analysis that was carried out in class VII-2 and VII-6 MTsN Tanjungbalai students are known to have increased their ability to master English vocabulary by using the song mnemonic method. The results show that the use of the song mnemonic method has a significant influence on students' mastery of English vocabulary. The test result data is divided into two, namely pre-test and post-test. Students are given material about “describe something”. Students' scores increased after using the song mnemonic method. This can be seen from previous research which shows that students' post-test scores increased compared to the pre-test score before using the song mnemonic method. Where the research results show that Ha is accepted and the hypothesis H0 is rejected.

The aim of this research is to find out whether the song mnemonic method is more effective in improving abilities students' vocabulary mastery. The research was conducted at MTsn Tanjungbalai, taking two classes as research samples. Class VII-2 as many as 27 students as an experimental class using the song mnemonic method model, and as many as 26 classes students as a control class using the conventional model.

The learning process in the control class uses models conventional. The students looked passive and only listened to the researcher's explanation. Students who dare to ask and answer questions only a few researchers reported. In KBM, educators explain the material, give examples of how to describe something, researchers also provide question and answer session with students, then students are asked to work on student worksheets provided by the researcher. Then they did do the questions many of them have difficulty with. Students are visible passive during the learning process. This resulted in a lack of understanding of the participants students on the material presented, so that students have difficulty in complete the tasks given by the researcher.

The ability to master high English vocabulary can be seen from the pretest and posttest scores. For interpret the results of this ability test, then

the score obtained were converted into five categories, namely very high, high, fair, low and very low. A pretest was given at the beginning of the research to find out to what extent the level of vocabulary abilities the students have. Results analysis of vocabulary mastery before treatment shows value the average of the experimental class and control class is 0.000 and 0.200. Based on From the pretest results, it can be concluded that the participants' ability to master English vocabulary experimental class and control class students were at a very low stage.