

CHAPTER IV

RESEARCH FINDINGS AND DISCUSSIONS

In this chapter, the writer presented the data which had been collected from the research in the field of study. The data were the result of pretest of experimental and control group, the result of posttest of experimental and control group, result of data analysis, and discussion.

A. Data Presentation

1. The Result of Pre Test Scores of the Experimental and Control Group

The pre test score at the experimental and control group was conducted on April 24, 2014 in the class VB (Monday, at time 07.00-08.40) and the class VA (Monday, at time 09.00-10.40) of SDN 7 Pahandut Palangka Raya. Then, the number of students was 62 students. The pretest scores of the experimental and control group were presented in Table 4.1:

Table 4.1 the Description of Pre Test Scores Achieved by the Students in Experimental and Control Group

No	The Pre Test score	
	Control	Experiment
1	68	59
2	76	46
3	50	38
4	41	45
5	56	50
6	60	40

7	65	30
8	56	40
9	60	55
10	35	41
11	68	45
12	45	39
13	50	40
14	58	48
15	50	45
16	62	41
17	70	45
18	58	30
19	48	32
20	60	30
21	59	48
22	58	35
23	50	30
24	57	46
25	53	50
26	59	41
27	56	30
28	70	38
29	64	40
30	60	32
31	-	41
32	-	32
Higher Score	76	59
Lowest Score	35	32
Mean	58,3	41,7
Std.Deviation	8,7	7,4
Std. Error Of Means	1,33	1,61

Based on the data above, the writer calculated using manual calculation, it could be seen that the students' highest score at experimental group was 59 and the lower score was 32. And also, it can be

seen that the mean was 41.7 , the standard deviation was 7.4 and the standard error was 1.33 (see appendix 6).

In addition, the result of pretest score in control group could be known that the highest score 76 and the lower score was 35. The mean was 58.3, the standard deviation was 8.7 and the standard error was 1.61 (see appendix 6).

2. The Result of Posttest Score of Experimental and Control Group

The post test score of experimental and control group was conducted on April 21, 2014 at VB (Monday, 07.00-08.40) and VA (Monday, 09.00-10.40) classes of SDN 7 Pahandut Palangka Raya. The numbers of students were 62 students. The post test scores of experimental and control group were presented in Table 4.2:

Table 4.2 the Description of Post Test Scores of the Data Achieved by the Students in Experimental and Control Group

No	The Pretes score	
	Control	Experiment
1	70	74
2	56	79
3	70	68
4	68	70
5	59	74
6	65	56
7	68	79
8	65	70
9	68	74
10	62	68
11	56	70
12	65	82

13	65	65
14	64	53
15	70	65
16	64	70
17	62	58
18	74	74
19	70	53
20	62	74
21	79	74
22	65	82
23	50	70
24	68	55
25	50	82
26	64	65
27	70	70
28	62	53
29	56	74
30	50	62
31	-	74
32	-	68
HigherScore	79	82
LowestScore	50	53
Mean	64	69
Std.Deviation	6,6	8,1
Std. Error of means	1,22	1,45

Based on the result of posttest score of experiment group above, it can be seen that the students' highest score was 82 and the student's lowest score was 53. The result of calculation showed the mean was 69, the standard deviation of post test score of experimental group was 8.1 and the standard error of post test score of experiment group was 1.45 (see appendix 6)

The result of calculation of control group showed the students' highest score was 79 and the student's lower score was 50. The mean was 64, the standard deviation of post test score of control group was 6.6 and the standard error of pre test score of control group was 1.22. (See appendix 6)

3. The Comparison of Posttest Score of Experimental and Control Group

The writer concluded the comparison of posttest score of experimental and control group. Here, the calculation of the result in Table 4.3:

Table 4.3 the Comparison of Post Test Scores Achieved by the Students in Experimental and Control Group

No	The Post Test Score		
	Control	Experiment	Increased
1	70	74	4
2	56	79	23
3	70	68	-2
4	68	70	2
5	59	74	5
6	65	56	-9
7	68	79	11
8	65	70	5
9	68	74	6
10	62	68	6
11	56	70	4
12	65	82	17
13	65	65	0
14	64	53	-11
15	70	65	-5
16	64	70	6
17	62	58	-4

18	74	74	0
19	70	53	-17
20	62	74	12
21	79	74	-5
22	65	82	17
23	50	70	20
24	68	55	-13
25	50	82	32
26	64	65	1
27	70	70	0
28	62	53	9
29	56	74	18
30	50	62	12
31	-	74	74
32	-	68	74
Total Score	1930	2220	

4. Testing the Normality and the Homogeneity

The writer was calculated the result of pre-test and post-test score of experiment and control group by using SPSS 20 program. The criteria of the normality test of score is the value of r (probability value/ critical value) is the higher than or equal to the level of significance α defined ($r \geq \alpha$), it means that the distribution is normal.⁶³ Then, the homogeneity is used to know the data were homogen or not.

⁶³ Budi Susetyo, M.Pd. , *Statiska untuk Analisis Data Penelitian Dilengkapi Cara Perhitungan dengan SPSS dan MS Word Excell*, Bandung: PT. Refika Aditama, page: 145

a) **The Normality of Pre Test and Post Test Score in Experiment and Control Group**

Table 4.4 The Test of Normality of Pretest

Group	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Pretest	,123	32	,200*	,946	32	,111
Posttest	,145	32	,084	,924	32	,027

The criteria of the normality test of pre-test and post-test is the value r (probability value/ critical value) is higher than or equal to the level of significance α defined ($r \geq \alpha$), it means that the distribution is normal.⁶⁴ In fact, based on the calculation above the value of r (probability value) from the pre-test and post-test score of the experiment and the control group in Kolmogorov- Smirnov table was higher than the level of significance α used or r of pre-test was 0,200 higher than 0,05 (α value) and r of post test was 0,084 was higher than 0,05 α value. Thus, the distribution of the data were normal, it meant that the students score of the pre test and post test score had normal distribution. Therefore, the write use parametric test by using independent samples t-test.

⁶⁴ Agust Irianto, *Statistik: Konsep Dasar dan Aplikasinya*, Jakarta: Prenada Media, 2004, p. 42

Table 4.5 the Normality of Posttest Score

Group		Tests of Normality ^a					
		Kolmogorov-Smirnov ^b			Shapiro-Wilk		
		Statistic	Df	Sig.	Statistic	Df	Sig.
Score	Experiment	,145	32	,084	,924	32	,027
	Control	,159	30	,052	,943	30	,111

From the table of Kolmogorov-Smirnov, the writer concluded that the significance of experiment group was 0.084 and the significance of control group was 0.52. It was higher than the significance 0,05. Thus, the distribution of the data was said to be in normal distribution.

b) Testing of Homogeneity of Pretest and Posttest Score of Experiment and Control Group.

Table 4.6 Test of Homogeneity

Test of Homogeneity of Variance					
		Levene Statistic	df1	df2	Sig.
Score	Based on Mean	1,390	1	62	,243
	Based on Median	1,044	1	62	,311
	Based on Median and with adjusted df	1,044	1	60,038	,311
	Based on trimmed mean	1,339	1	62	,252

Based on the table above, the result of the analysis using SPSS program showed that the Levene Statistic was 1,390, the df1 was 1 and df2 was 62 and the value of significance (sig.) was 0.243. The writer concluded that the homogeneity of posttest score of

experimental and control group was accepted because the value of significance (sig. 0,243) was higher than significance level (sig. 0,05). Thus, it was said that the data were homogeneous.

B. Result of Data Analysis

1. Testing Hypothesis Using Manual Calculation

To test the hypothesis of the study, the writer used t-test statistical calculation. Firstly, the writer calculated the standard deviation and the standard error of X_1 and X_2 . It was found the standard deviation and the standard error of post test of X_1 and X_2 at the previous data presentation. It could be seen on this following table 4.7:

Table 4.7 The Standard Deviation and Standard Error of X_1 and X_2

Variable	The Standard Deviation	The Standard Error
X_1	8.1	1.45
X_2	6.6	1.22

Where:

X_1 = Experimental Group

X_2 = Control Group

The table showed the result of the standard deviation calculation of X_1 was 8,1 and the result of the standard error mean calculation was 1,45. The result of the standard deviation calculation of X_2 was 6,6 and the result of the standard error mean calculation was 1.22

The next step, the writer calculated the standard error of the differences mean between X_1 and X_2 as follows:

Standard Error of Mean of Score Difference between Variable I
and Variable II:

$$SE_{M1} - SE_{M2} = \sqrt{SE_{M1}^2 + SE_{M2}^2}$$

$$SE_{M1} - SE_{M2} = \sqrt{1.447^2 + 1.22^2}$$

$$SE_{M1} - SE_{M2} = \sqrt{2.093809 + 1.4884}$$

$$SE_{M1} - SE_{M2} = \sqrt{3,582209}$$

$$SE_{M1} - SE_{M2} = 1,8926724$$

$$SE_{M1} - SE_{M2} = 1,89$$

The calculation above showed the standard error of the differences mean between X_1 and X_2 was 2,097. Then, it was inserted to the t_o formula to get the value of t observe as follows:

$$t_o = \frac{M1 - M2}{SE_{M1} - SE_{M2}}$$

$$t_o = \frac{69,4 - 64}{1,89}$$

$$t_o = \frac{5,4}{1,89}$$

$$t_o = 2,8571429 = 2,857$$

With the criteria:

If $t\text{-test (t-observed)} \geq t\text{-table}$, H_a is accepted and H_o is rejected.

If $t\text{-test (t-observed)} < t\text{-table}$, H_a is rejected and H_o is accepted.

Then, the writer interpreted the result of t -test. Previously, the writer accounted the degree of freedom (df) with the formula:

$$\begin{aligned} df &= (N_1 + N_2) - 2 \\ &= (32 + 30) - 2 = 60 \end{aligned}$$

t_{table} at df 60 at 5% significant level = 2.000

The writer chose the significant levels on 5%; it means the significant level of refusal of null hypothesis on 5%. The writer decided the significance level at 5% due to the hypothesis typed stated on non-directional (two-tailed test). It meant that the hypothesis can't direct the prediction of alternative hypothesis.

The calculation above showed the result of t-test calculation as in the table follows:

Table 4.8 The Result of T-test

Variable	T observed	T table		Df/db
		5%	1%	
$X_1 - X_2$	2.857	2.000	2.650	60

Where:

X_1 = Experimental Group

X_2 = Control Group

T observe = The Calculated Value

T table = The Distribution of t value

Df/db = Degree of Freedom

Based on the result of hypothesis test calculation, it was found that the value of t_{observed} was greater than the value of t_{table} at significance level or $2.000 < 2,857 > 2.650$. It meant H_a was accepted and H_0 was rejected.

It could be interpreted based on the result of calculation that H_a stating the students taught by using Jazz Chants Model have better vocabulary mastery than those taught using conventional model was accepted and H_o stating that the students taught by Jazz Chants Model do not have better vocabulary mastery than those taught using conventional model was rejected. Therefore teaching using Jazz chant gave significant effect on the students' vocabulary mastery of the students fifth grade SDN 7 Pahandut Palangka Raya.

2. Testing Hypothesis Using SPSS Program

The writer also applied SPSS 20 program to calculate t test in testing hypothesis of the study. The result of t test using SPSS 20 was used to support the manual calculation of the t test. The result of the t test using SPSS 200 program could be seen as follows:

Table 4.9 the Standard Deviation and the Standard Error of X_1 and X_2

	Group	N	Mean	Std. Deviation	Std. Error Mean
Score	Experiment	32	68,91	8,551	1,51
	Control	30	63,90	6,935	1,27

The table showed the result of the standard deviation calculation of X_1 was 8.551 and the result of the standard error mean calculation was 1.51. The result of the standard deviation calculation of X_2 was 6.935 and the standard error mean calculation was 1.27.

Table 4.10 the Calculation T-test Using SPSS 20 program 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
Equal variances assumed	1,427	,237	2,522	60	,014	5,00625	1,98522	1,03521	8,97729
or Equal variances not assumed			2,539	58,812	,014	5,00625	1,97183	1,06037	8,95213

Based on the result of t-value using SPSS 20 program. Since the result of post test between experimental and control group had difference score of variance, it found that the result of t observed was 2.522, the result of mean difference between experimental and control group was 5,00625.

To examine the truth or the null hypothesis stating that there is no significant difference between students' vocabulary using jazz chants and without jazz chants in vocabulary mastery at fifth grade SDN 7 Pahandut Palangka Raya was rejected, the result of post test was interpreted on the result of degree freedom to get *t table*. The result of degree freedom (df) was 60. The following table was the result of *t observed* and *t table* from 60 df at 5% and 1 % significance level.

Table 4.11 The Result of T-test

Variable	t observe	t table		Df/db
		5%	1%	
$X_1 - X_2$	2.522	2.000	2.660	60

Where:

X_1 = Experimental Group

X_2 = Control Group

T observe = The Calculated Value

T table = The Distribution of t value

Df/db = Degree of Freedom

3. Interpretation

The interpretation of using SPSS 20 program also supported the result of manual calculation. From the result of t-value using SPSS above was found that H_0 was rejected. It was found t_{observed} (2,522) was higher than t_{table} (2,000) in the significance level of 5% and higher in the significance level of 1% (2,650). It could be interpreted that alternative hypothesis (H_a) was accepted. It meant students who are taught by Jazz chant model significant effect on the students' vocabulary mastery of students fifth grade SDN 7 Pahandut Palangka Raya. On the other hand, students who are taught by non Jazz chant model do not have better vocabulary mastery than those taught by Jazz chant. Simply, it could be interpreted that null hypothesis was rejected.

C. Discussion

The result of the analysis shows that Jazz chants model gives significant effect to the students' vocabulary mastery. It could be proved from the students' score; the students taught using Jazz Chants Model reached higher score than those taught without using jazz chant model. It was found the mean of experiment group score (X_1) was 69,4 and the mean of control group score (X_2) was 64. Then, those results were compared using T-test and it was found t_{observed} computation using manual was 2,522 and t_{table} was 2, 000. It meant, from the computation was found $t_{\text{observed}} > t_{\text{table}}$.

To support the result of testing hypothesis, the writer also calculated the hypothesis using SPSS 20 program. The result of the analysis showed that the students who are taught by using jazz chant model gave significant effect on the students' vocabulary mastery. It is proved by the value of t_{observed} that was higher than t_{table} , either at 5% significance level or at 1% significance level ($2,000 < 2,522 < 2,560$).

Those statistical findings were suitable with the theories as mentioned before. Jazz chant do promote language learning for they not only aid pronunciation, make vocabulary and structures memorable but also bring variety and fun to the language learning classroom, the learners liked to repeat and imitate the articulation of spoken english thus when they chanted and sang and heard the stresses, rhythms, intonations and melodies, the all combined to

help them embed the new vocabulary in their minds and recall it correctly at a latter time.⁶⁵

Jazz Chants are an attractive strategy for children in teaching ESL. It is a fun material for both teachers and students in the classroom because the chants are rhythmic and short. Also, Jazz Chants provide students with the natural stress and intonation patterns of conversational American English; chants improve their abilities in speaking and listening skills while reinforcing the basic grammatical structures of everyday life situations.⁶⁶

These findings were suitable with the theories as stated in chapter II. The first, jazz chants was an interesting technique for the students because it was a completely new technique for the students at SDN 7 Pahandut Palangka Raya. It shows from the students' response that they were very enthusiastic when they were taught by using jazz chants.

Second, mastering vocabulary was the important one in learning English. It was the obligation of this school. It could help the students to master vocabulary. It also made the students aware of materials that were not essential to the students' memorizing to be deleted. So, jazz chants are suitable for all students no matter what age they are and what level of English, learning strategies, intelligence, interests or learning problems they have.⁶⁷

⁶⁵ Chun fu chen and william terry alred, Teaching english thorough song and chants to develop young learner's language proficiency at an elementary school,(Applied english departement), p.1 .

⁶⁶ Mariabel peralta and Guadalupe quito, *The use of jazz chant for children in the teaching learning process of english*,(University of cuenca philosophy faculty english and literature school, Cuenca 2010), p. 41.

⁶⁷ Jin Zhang, *Jazz Chants in English language teeching*, China: Chuzhou University 2011 , p.2 URL: [Http://ojs.academypublisher.com](http://ojs.academypublisher.com) (acsessed on february, 26, 2013)

Third, Chants are simple, provide the language children really use and are repetitiv. which, mainly in case of very young learners, is quite necessary. They are situable for all ages, teachers must only choose the right accompanying activities. They help students to remember difficult words or phrases.

There are reasons why jazz chants give effect on the students' vocabulary fifth grade students at SDN 7 Pahandut Palangka Raya. First, using jazz chant, the students could easy and fun to memories words or new vocabulary. Students get greatly motivated by using chants in the foreign language classroom. Chants involve human emotions and students want to sing even if they don't understand the meaning of the words. Chants create an atmosphere of interest in the study of English and can lead from a "teacher centered" to a "student centered" class". So, Students become themselves when they sing or play, and they aren't afraid of making errors. Second, Jazz Chants also provide an innovative, exciting and effective way of improving students' speaking and listening skills. Students can hear natural spoken English rather than the teachers' pronunciation all the time, and they can keep the sounds in their minds. Third, Jazz Chant strategy is based on a combination of repetition and learner response. However, it avoids boring mechanical drills because it is meaning-based and communication-based, and, more important its language use is often authentic. During the use of a jazz chant students are involved in a real life situation context.

Based on the evidence above, it could be concluded that the idea development quality of students' vocabulary mastery was better by using jazz chants model.