CHAPTER IV

RESULT OF THE STUDY

In this chapter, the writer presented the data which had been collected from the research in the field of study. The data were the presentation of data, the result of test consisted of pretest and posttest scores from the student's speaking skills in statistical T-test and SPSS, and discussion.

A. The Presentation of Data

1. Distribution of pre-test and post-tets score of experiment group

The pre-test of the experiment group were presented in the following table;

Table 6.1 The Description of Pre Test Scores of the Data Achieved by the Students in Experimental Group

Students' Codes	Score	Classification
E1	45	Fairly Good
E2	35	Poor
E3	21	Poor
E4	20	Very Poor
E5	55	Fairly Good
E6	42	Fairly Good
E7	18	Very Poor
E8	45	Fairly Good
E9	50	Fairly Good
E10	43	Fairly Good
E11	39	Poor
E12	45	Fairly Good
E13	70	Good
E14	42	Fairly Good
E15	39	Poor

E16	42	Fairly Good
E17	40	Poor
E18	45	Fairly Good
E19	82	Very Good
E20	72	Good
E21	59	Fairly Good
E22	60	Fairly Good
E23	62	Good
E24	34	Poor
E25	55	Fairly Good
E26	33	Poor
E27	39	Poor
E28	50	Fairly Good
E29	63	Good
E30	81	Very Good
E31	52	Fairly Good

Based on the data above, it can be seen that the students' highest score was 82 and the student's lowest score was 18. To determine the range of score, the class interval, and interval of temporary, the researcher calculated using formula as follows:

The Highest Score (H) = 82

The lowest Score (L) = 18

The Range of Score (R) = H-L+1

= 82 –18

= 64 + 1

= 65

The Class Interval (K) =1+ (3.3) x Log 31

= 1+ (3.3) x 1,4913616938343

= 1+ 4,9214935896531

= 5. 9214935896531

= 6

Interval of Temporary $= \frac{R}{K} = \frac{65}{6} = 10{,}83 = 11$

So, the range of score was 65, the class interval was 11, and interval of temporary was 6. It was presented using frequency distribution in the following table:

Table 6.2. Frequency Distribution of the Pre-Test Score of the Experimental Group

Class (k)	Interval (I)	Frequency (F)	Mid Point	The Limitation of Each Group	Frequency Relative (%)	Frequency Cumulative (%)
1	78 – 83	2	80.5	77.5 – 83.5	6,452	6,452
2	72 – 77	1	74.5	71.5 – 77.5	3,226	9,68
3	66 – 71	1	68.5	65.5 – 71.5	3,226	12,90
4	60 – 65	3	62.5	59.5 – 65.5	9,678	22,58
5	54 – 59	3	56.5	53.5 – 59.5	9,678	32,26
6	48 – 53	3	50.5	47.5 – 53.5	9,678	41,94
7	42 – 47	8	44.5	41.5 – 47.5	25,807	67,75
8	36– 41	4	38.5	35.5 – 41.5	12,903	80,65
9	30 – 35	3	32.5	29.5 – 35.5	9,678	90,33
10	24 – 29	0	26.5	23.5 – 29.5	0,000	90,33
11	18 – 23	3	20.5	17.5 – 23.5	9,678	100
Total		31			100	

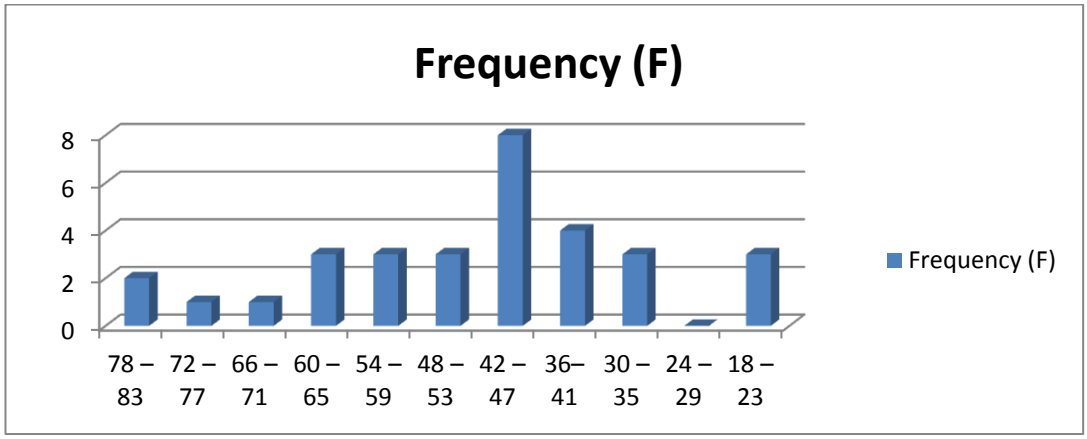

Figure 6.1 The Frequency Distribution of Pretest Score of the Experimental Group

It can be seen from the figure above, the students' pretest scores in experimental group. There were two students who got score 78-83. There was one ent who got score 72-77. There were one students who got score 66-71. There three students who got score 60-65. There were three students who got score 9. There were three students who got score 48-53. There were eight students who got score 42-47. There were four students who got score 36-41. There were three students who got score 30-35. There was no student who got score 24-29. And there were three students who got score 18-23.

Frequency

Table 6.3 Classification of the Students' Speaking Skill in the Pre-test of the Experimental Group.

Rating	Scale	Classification	Frequency	Percentage
81-100	5	Very good	2	6.45%
61-80	4	Good	4	12.90%
41-60	3	Fairly good	15	48.39%
21-40	2	Poor	8	25.81%
0-20	1	Very poor	2	6.45%

In the table above, there were 31 students observed in this research before given treatment in experiment group. From all of the students observed, there were 2 students (6.45 %) who got very good scores, there were 4 students (12.90%) who got good scores, there were 15 students (48.39%) who got fairly good scores, there were 8 students (25.81%) who got poor scores, and there were 2 students (6.45%) who got very poor scores.

The next step, the researcher tabulated the scores into the table for the calculation of mean, median, and modus as follows:

Table 6.4 The Table for Calculating Mean of Pretest Score of the Experimental Group

Interval (I)	**Frequency (F)**	**Mid Point (x)**	**FX**	**X'**	**Fx'**	**Fkb**	**Fka**
78 – 83	**2**	**80,5**	161	6	12	31	2
72 – 77	**1**	**74,5**	74,5	5	5	29	3
66 – 71	**1**	**68,5**	68,5	4	4	28	4
60 – 65	**3**	**62,5**	187,5	3	9	27	7
54 – 59	**3**	**56,5**	169,5	2	6	24	10
48 – 53	**3**	**50,5**	151,5	1	3	21	13
42 – 47	**8**	**44,5**	356	0	0	18	21
36– 41	**4**	**38,5**	154	-1	-4	10	25
30 – 35	**3**	**32,5**	97,5	-2	-6	6	28
24 – 29	**0**	**26,5**	0	-3	0	3	28
18 – 23	**3**	**20,5**	61,5	-4	-12	3	31
	∑F = 31		**∑ FX =1481, 5**		**∑Fx'**=17		

a. Mean

$$Mx = \frac{\sum fX}{N}$$

$$= \frac{1481{,}5}{31}$$

$$= 47.790$$

The calculation above showed the mean value: 47.790.

The last step, the researcher tabulated the scores of pre test of experimental group into the table for the calculation of standard deviation and the standard error. The tabulation of the scores of pre test of experimental group as follows:

Table 6.5 The Table for Calculating Standard Deviation and Standard Error of the Pretest Score.

Interval (I)	Frequency (F)	Mid Point (x)	Fx	x'	Fx'	x'²	Fx'²
78 – 83	**2**	**80,5**	161	6	12	36	72
72 – 77	**1**	**74,5**	74,5	5	5	25	25
66 – 71	**1**	**68,5**	68,5	4	4	16	16
60 – 65	**3**	**62,5**	187,5	3	9	9	27
54 – 59	**3**	**56,5**	169,5	2	6	4	12
48 – 53	**3**	**50,5**	151,5	1	3	1	3
42 – 47	**8**	**44,5**	356	0	0	0	0
36– 41	**4**	**38,5**	154	-1	-4	1	4
30 – 35	**3**	**32,5**	97,5	-2	-6	4	12
24 – 29	**0**	**26,5**	0	-3	0	9	0
18 – 23	**3**	**20,5**	61,5	-4	-12	16	48
	∑F = 31		**1481,5**		**∑Fx'**=17		**∑Fx'²**=219

b. Standard Deviation

$$SD_1 = \text{i}\sqrt{\frac{\sum fx'^2}{N} - (\frac{\sum fx'}{N})^2}$$

$$SD_1 = 6\sqrt{\frac{219}{31} - (\frac{17}{31})^2}$$

$$SD_1 = 6\ \sqrt{7.0645 - (0.5483)^2}$$

$$SD_1 = 6\sqrt{7.0645 - 0.30063}$$

$$SD_1 = 6\ \sqrt{6.76387}$$

$$SD_1 = 6 \text{ x } 2.600744$$

$$SD_1 = 15.60447$$

c. Standard Error

$$\text{SEm}_1 = \frac{SD_1}{\sqrt{N_1 - 1}}$$

$$\text{SEm}_1 = \frac{15.60447}{\sqrt{31-1}}$$

$$\text{SEm}_1 = \frac{15.60447}{\sqrt{30}}$$

$$SEm_1 = \frac{15.60447}{5.47722558}$$

$$SEm_1 = 2.8489734$$

Table 6.6 The Description of Post Test Scores of the Data Achieved by the Students in Experimental Group

Students' Codes	Total score	Qualifications
E1	60	Fairly Good
E2	50	Fairly Good
E3	45	Fairly Good
E4	38	Poor
E5	65	Good
E6	60	Fairly Good
E7	45	Fairly Good
E8	57	Fairly Good
E9	55	Fairly Good
E10	58	Fairly Good
E11	48	Fairly Good
E12	55	Fairly Good
E13	79	Good
E14	50	Fairly Good
E15	49	Fairly Good
E16	53	Fairly Good
E17	43	Fairly Good
E18	53	Fairly Good
E19	85	Very Good
E20	78	Good
E21	55	Fairly Good
E22	62	Good
E23	63	Good
E24	38	Poor
E25	58	Fairly Good
E26	39	Poor
E27	42	Fairly Good

E28	58	Fairly Good
E29	70	Good
E30	82	Very Good
E31	58	Fairly Good

Based on the data above, it can be seen that the students' highest score was 85 and the student's lowest score was 38. To determine the range of score, the class interval, and interval of temporary, the researcher calculated using formula as follows:

The Highest Score (H) = 85

The lowest Score (L) = 38

The Range of Score (R) = H-L+1

= 85-38+1

= 47+1

= 48

The Class Interval (K) =1+ (3.3) x Log31

= 1+ (3.3) x 1,4913616938343

= 1+ 4,9214935896531

= 5,9214935896531

= 6

Interval of Temporary $= \frac{R}{K} = \frac{48}{6}$

$= 8$

So, the range of score was 48, the class interval was 6, and interval of temporary was 8. It was presented using frequency distribution in the following table:

Table 6.7 The Frequency Distribution of the Post Test Score of the Experimental Group

Class (k)	Interval (I)	Frequency (F)	Mid Point	The Limitation of Each Group	Frequency Relative (%)	Frequency Cumulative (%)
1	**80-85**	2	82.5	79.5-85.5	6.451	100
2	**74-79**	2	76.5	73.5-79.5	6.451	93.549
3	**68-73**	1	70.5	67.5-73.5	3.225	87.098
4	**62-67**	3	64.5	61.5-67.5	9.678	83.873
5	**56-61**	7	58.5	55.5-61.5	22.581	74.195
6	**50-55**	7	52.5	49.5-55.5	22.581	51.614
7	**44-49**	4	46.5	43.5-49.5	12.903	29.033
8	**38-43**	5	40.5	37.5-43.5	16.130	16.130
Total		**∑F = 31**			**100**	

The Score Interval

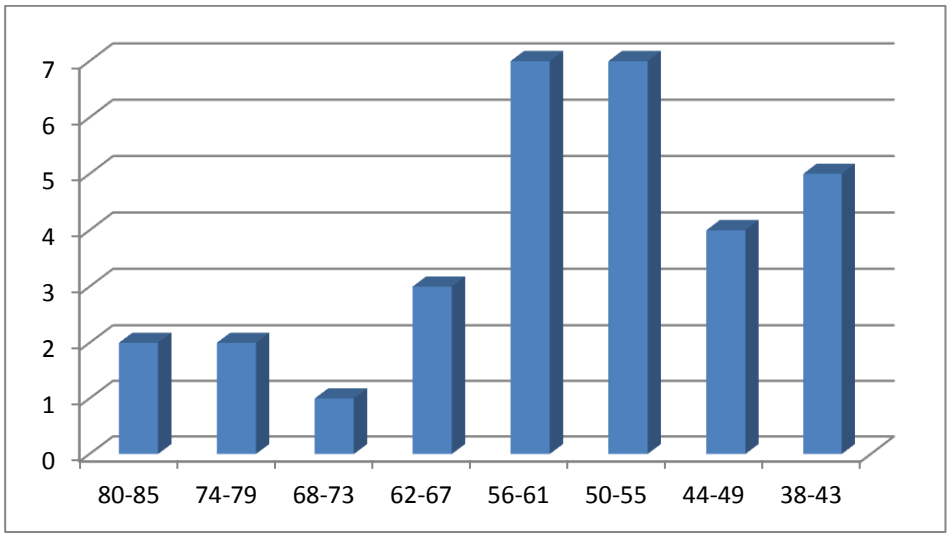

Figure 6.2 The Frequency Distribution of Post-Test Score of the Experimental Group

It can be seen from the figure above, the students' posttest score in experimental group. There were two students who got score 80-85. There were two students who got score 74-79. There was one student who got score 68-73. There were three students who got score 62-67. There were seven students who got score 56-61. There were seven students who got score 50-55. There were four students who got score 44-49. And there were five students who got score 38-43.

Table 6.8 Classification of the Students' Speaking Skill in the Post-test of the Experimental Group.

Rating	Scale	Classification	Frequency	Percentage
81-100	5	Very good	2	6.45%
61-80	4	Good	6	19.35%
41-60	3	Fairly good	20	64.52%
21-40	2	Poor	3	9.68%
0-20	1	Very poor	0	0 %

In the table above, there were 31 students observed in this research before given treatment in experiment group. From all of the students observed, there was 2 student (6.45%) who got very good scores, there were 6 students (19.35%) who got good scores, there were 20 students (64.52%) who got fairly good, there were 3 students (9.68%) who got poor scores, and there was no student (0 %) who got very poor score.

The next step, the researcher tabulated the scores into the table for the calculation of mean, median, and modus as follows:

Table 6.9 The Table for Calculating Mean of Post-test Score of the Experimental Group

Interval (I)	Frequency (F)	Mid Point (x)	FX	X'	Fx'	Fkb	Fka
80-85	2	82,5	165	5	10	31	2
74-79	2	76,5	153	4	8	29	4
68-73	1	70,5	70,5	3	3	27	5
62-67	3	64,5	193,5	2	6	26	8
56-61	7	58,5	409,5	1	7	23	15
50-55	7	52,5	367,5	0	0	16	22
44-49	4	46,5	186	-1	-4	9	26
38-43	5	40,5	202,5	-2	-10	5	31
	∑F = 31		∑FX =1747,5		∑ **Fx'=20**		

a. Mean

$$Mx = \frac{\sum fX}{N}$$

$$= \frac{1747,5}{31}$$

= 56.370

The calculation above showed the mean value: 56.370

The last step, the researcher tabulated the scores of post test of experimental group into the table for the calculation of standard deviation and the standard error as follows:

Table 6.10 The Table for Calculating Standard Deviation and Standard Error of the Posttest Score

Interval (I)	Frequency (F)	Mid Point (x)	FX	X'	x'²	Fx'	Fx'²
80-85	2	82,5	165	5	25	10	50
74-79	2	76,5	153	4	16	8	32
68-73	1	70,5	70,5	3	9	3	9
62-67	3	64,5	193,5	2	4	6	12
56-61	7	58,5	409,5	1	1	7	7
50-55	7	52,5	367,5	0	0	0	0
44-49	4	46,5	186	-1	1	-4	4
38-43	5	40,5	202,5	-2	4	-10	20
	∑F = 31		∑FX = 1747,5			∑ **Fx'= 20**	∑ **Fx'²** = 134

b. Standard Deviation

$$SD_3 = \text{i}\sqrt{\frac{\sum fx'^2}{N} - (\frac{\sum fx'}{N})^2}$$

$$SD_3 = 6\sqrt{\frac{134}{31} - (\frac{20}{31})^2}$$

$$SD_3 = 6\ \sqrt{4.32258 - (0.64516)^2}$$

$SD_2 = 6\sqrt{4.32258 - 0.41623}$

$SD_2 = 6 \sqrt{3.90635}$

$SD_2 = 6$ x 1.97644

$SD_2 = 11.8587$

c. Standard Error

$$SEm_3 = \frac{SD_2}{\sqrt{N_2 - 1}}$$

$$SEm_3 = \frac{11.8587}{\sqrt{31-1}}$$

$$SEm_3 = \frac{11.8587}{\sqrt{30}}$$

$$SEm_3 = \frac{11.8587}{5.4772}$$

$SEm_3 = 2.1651027$

The result of calculation showed that the standard deviation of post test score of experimental group was 11.8587 and the standard error of post test score of experimental group was 2.1651027.

The researcher also calculated the data calculation of post test score of experimental group using SPSS V 20.0 program. The result of statistic table is as follows:

Table 6.11 The Frequency Distribution of the Post Test Scores of the Experimental Group Using SPSS V 20.0 Program

posttest_score

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	38	2	6.5	6.5	6.5
	39	1	3.2	3.2	9.7
	42	1	3.2	3.2	12.9
	43	1	3.2	3.2	16.1
	45	2	6.5	6.5	22.6
	48	1	3.2	3.2	25.8
	49	1	3.2	3.2	29.0
	50	2	6.5	6.5	35.5
	53	2	6.5	6.5	41.9
	55	3	9.7	9.7	51.6
	57	1	3.2	3.2	54.8
	58	4	12.9	12.9	67.7
	60	2	6.5	6.5	74.2
	62	1	3.2	3.2	77.4
	63	1	3.2	3.2	80.6
	65	1	3.2	3.2	83.9
	70	1	3.2	3.2	87.1
	78	1	3.2	3.2	90.3
	79	1	3.2	3.2	93.5
	82	1	3.2	3.2	96.8
	85	1	3.2	3.2	100.0
	Total	31	100.0	100.0	

The table above showed the result of post test scores achieved by the experimental group using SPSS program. It could be seen that there were two students who got 38 (6.5%). One student who got 39 (3.2%). One student who got score 42 (3.2%). One student who got score 43 (3.2%). two students who got score 45 (6.5%). One student who got score 48 (3.2%). One student who got score 49 (3.2%). two students who got score 50 (6.5%). Two students who got 53 (6.5%). Three students who got score 55 (9.7%). One student who got score 57 (3.2%). Four students who got score 58 (12.9%). Two students who got score 60 (6.5%). One student who got score 62 (3.2%). One student who got score 63 (3.2%). One student who got score 65 (3.2%). One student who got score 70 (3.2%). One student who got score 78 (3.2%). One student who got score 79 (3.2%). One student who got score 82 (3.2%). And one student who got score 85 (3.2%).

The next step, the researcher calculated the score of mean, median, mode, standard deviation, and standard error of mean of post-test in experimental group as follows:

Table 6.12 The Table of Calculation of Mean, Standard Deviation, and Standard Error of Mean of Post-Test Score in Experimental Group Using SPSS V 20.0 Program

Statistics

posttest_score

N	Valid	31
	Missing	0
Mean		56.48
Std. Error of Mean		2.244
Median		55.00
Mode		58
Std. Deviation		12.495

Minimum	38
Maximum	85
Sum	1751

The table showed the result of mean calculation was 56.48. The result of standard deviation was 12.495 And the result of standard error of mean calculation was 2.244.

2. Distribution of pre-test and post-tets score for control group

The pre-test of the experiment group were presented in the following table;

Tabel 6.13 The Description of Pre Test Scores of the Data Achieved by the Students in Control Group

Students' Codes	Total score	Qualification
C1	45	Fairly Good
C2	50	Fairly Good
C3	40	Poor
C4	60	Fairly Good
C5	62	Good
C6	38	Poor
C7	41	Fairly Good
C8	58	Fairly Good
C9	39	Poor
C10	40	Poor
C11	35	Poor
C12	50	Fairly good
C13	45	Fairly Good
C14	62	Good
C15	62	Good
C16	20	Very Poor
C17	60	Fairly Good
C18	45	Fairly Good

C19	70	Good
C20	68	Good
C21	43	Fairly Good
C22	40	Poor
C23	47	Fairly Good
C24	39	Poor
C25	62	Good
C26	45	Fairly Good
C27	40	Poor
C28	45	Fairly Good
C29	43	Fairly Good
C30	59	Fairly Good
C31	42	Fairly Good
C32	50	Fairly Good
C33	63	Good

Based on the data above, it can be seen that the students' highest score was 70 and the student's lowest score was 20. To determine the range of score, the class interval, and interval of temporary, the researcher calculated using formula as follows:

The Highest Score (H) = 70

The lowest Score (L) = 20

The Range of Score (R) = H-L+1

= 70-20+1

= 50 + 1

= 51

The Class Interval (K) =1+ (3.3) x Log 33

= 1+ (3.3) x 1,5185139398779

= 1+ 5,0110960015970

= 6,0110960015970

= 6

Interval of Temporary $= \frac{R}{K} = \frac{51}{6}$

= 8.5 = 9

So, the range of score was 51, the class interval was 6, and interval of temporary was 9. It was presented using frequency distribution in the following table:

Table 6.14 Frequency Distribution of the Pre test Score of the Control Group

Class (k)	Interval (I)	Frequency (F)	Mid Point	The Limitation of Each Group	Frequency Relative (%)	Frequency Cumulative (%)
1	68 – 73	2	70.5	67.5 - 73.5	6.060	100
2	62 – 67	5	64.5	61.5 – 67.5	15.152	93.94
3	56 – 61	4	58.5	55.5 – 61.5	12.122	78.788
4	50 – 55	3	52.5	49.5 – 55.5	9.091	66.666
5	44 – 49	6	46.5	43.5 – 49.5	18.182	57.575
6	38 – 43	11	40.5	37.5 – 42.5	33.333	39.393
7	32 – 37	1	34.5	31.5 – 37.5	3.030	6.060
8	26 – 31	0	28.5	25.5 – 31.5	0	3.030
9	20 – 25	1	22.5	19.5 – 25.5	3.030	3.030

Total	∑**F** = 33			100	

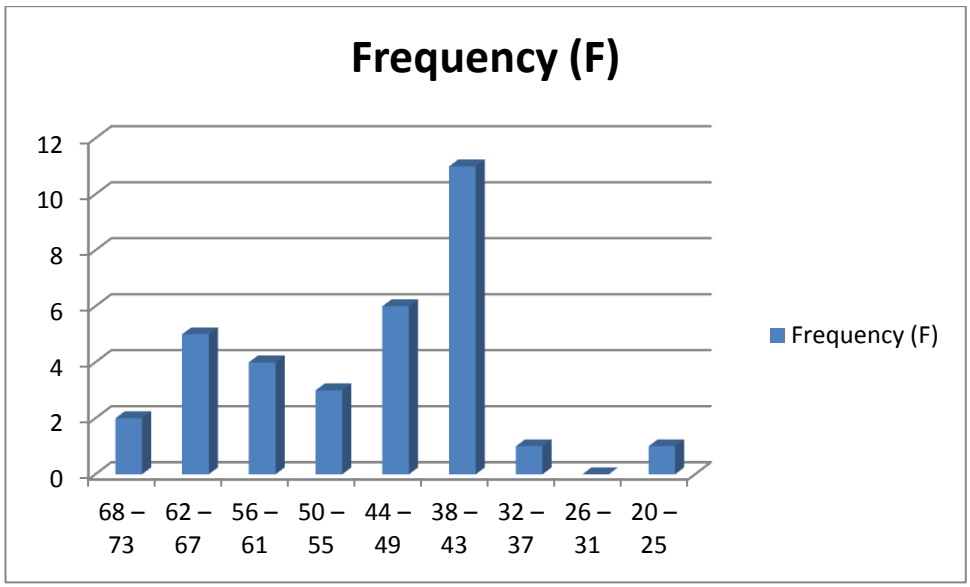

Figure 6.3 The Frequency Distribution of Pre Test Score of the Control Group

It can be seen from the figure above, the students' pretest score in control group. There were two students who got score 68 – 73. There were five students who got score 62-67. There were four students who got score 56-61. There were three students who got score 50-55. There were six students who got score 44-49. There were eleven students who got score 38-43. There was one students who got score 32-37. There was no student who got score 26-31. And there was one student who got score 20-25.

Table 6.15 Classification of the Students' Speaking Skill in the Pre-test of the Control Group.

Rating	Scale	Classification	Frequency	Percentage
81-100	5	Very good	0	0 %
61-80	4	Good	7	21.21%

41-60	3	Fairly good	17	51.52%
21-40	2	Poor	8	24.24%
0-20	1	Very poor	1	3.030%

In the table above, there were 33 students observed in this research before given treatment in control group. From all of the students observed, there was no student (3.1%) who got very good scores, there were 7 students (21.21%) who got good scores, there were 17 students (51.52%) who got fairly good scores, there were 8 students (24.24%) who got poor scores, and there was 1 student (3.030%) who got very poor scores.

The next step, the researcher tabulated the scores into the table for the calculation of mean, median, and modus as follows:

Table 6.16 The Table for Calculating Mean of Pre Test Score of the Control Group

Interval (I)	**Frequency (F)**	**Mid Point (x)**	**FX**	**X'**	**Fx'**	**Fkb**	**Fka**
68 – 73	2	70,5	141	3	6	33	2
62 – 67	5	64,5	322,5	2	10	31	7
56 – 61	4	58,5	234	1	4	26	11
50 – 55	3	52,5	157,5	0	0	22	14
44 – 49	6	46,5	279	-1	-6	19	20
38 – 43	11	40,5	445,5	-2	-22	13	31
32 – 37	1	34,5	34,5	-3	-3	2	32
26 – 31	0	28,5	0	-4	0	1	32
20 – 25	1	22,5	22,5	-5	-5	1	
	∑F = 33		**∑ FX =1636,5**		**∑ Fx' = -16**		

a. Mean

$$Mx = \frac{\sum fX}{N}$$

$$= \frac{1636,5}{33}$$

$$= 49.5901$$

The calculation above showed of mean value was 49.5901 of the pretest of the control group.

The last step, the researcher tabulated the scores of pre test of control group into the table for the calculation of standard deviation and the standard error as follows:

Table 6.17 The Table for Calculating Standard Deviation and Standard Error of the Pretest Score of the Control Group

Interval (I)	**Frequency (F)**	**Mid Point (x)**	**FX**	**X'**	**X'²**	**FX'**	**FX'²**
68 – 73	2	70,5	141	4	16	8	32
62 – 67	5	64,5	322,5	3	9	15	45
56 – 61	4	58,5	234	2	4	8	16
50 – 55	3	52,5	157,5	1	1	3	3
44 – 49	6	46,5	279	0	0	0	0
38 – 43	11	40,5	445,5	-1	1	-11	11
32 – 37	1	34,5	34,5	-2	4	-2	4
26 – 31	0	28,5	0	-3	9	0	0
20 – 25	1	22,5	22,5	-4	16	-4	16
	∑F = 33		**∑ FX =1636, 5**			**∑ Fx' = 17**	**∑FX'²=127**

b. Standard Deviation

$$SD_2 = \text{i}\sqrt{\frac{\sum fx'^2}{N} - (\frac{\sum fx'}{N})^2}$$

$$SD_2 = 6\sqrt{\frac{127}{33} - (\frac{17}{33})^2}$$

$$SD_2 = 6\ \sqrt{3.849 - (0.515)^2}$$

$$SD_2 = 6\sqrt{3.849 - 0.2652}$$

$$SD_2 = 6\ \sqrt{3.5838}$$

$$SD_2 = 6 \text{ x } 1.893092$$

$$SD_2 = 11.358552$$

c. Standard Error

$$\text{SEm}_2 = \frac{SD_2}{\sqrt{N_2 - 1}}$$

$$\text{SEm}_2 = \frac{11.358552}{\sqrt{33 - 1}}$$

$$\text{SEm}_2 = \frac{11.358552}{\sqrt{32}}$$

$$\text{SEm}_2 = \frac{11.358552}{5.65685425}$$

$SEm_2 = 2.00792729$

The result of calculation showed that the standard deviation of pre test score of control group: 11.358552 and the standard error of pre test score of control group: 2.00792729

Tabel 6.18 The Description of Post Test Scores of the Data Achieved by the Students in Control Group

Students' Codes	Total score	Qualification
C1	48	Fairly Good
C2	50	Fairly Good
C3	42	Fairly Good
C4	57	Fairly Good
C5	65	Good
C6	42	Fairly Good
C7	45	Fairly Good
C8	55	Fairly Good
C9	35	Poor
C10	45	Fairly Good
C11	39	Poor
C12	57	Fairly Good
C13	52	Fairly Good
C14	64	Good
C15	65	Good
C16	28	Poor
C17	60	Fairly Good
C18	48	Fairly Good
C19	68	Good
C20	72	Good
C21	50	Fairly Good
C22	35	Poor
C23	48	Fairly Good
C24	35	Poor

C25	60	Fairly Good
C26	47	Fairly Good
C27	40	Poor
C28	42	Fairly Good
C29	40	Poor
C30	60	Fairly Good
C31	45	Fairly Good
C32	57	Fairly Good
C33	67	Good

Based on the data above, it can be seen that the students' highest score was 72 and the student's lowest score was 28. To determine the range of score, the class interval, and interval of temporary, the researcher calculated using formula as follows:

The Highest Score (H) = 72

The lowest Score (L) = 28

The Range of Score (R) = H-L+1

= 72-28+1

=44+1

= 45

The Class Interval (K) =1+ (3.3) x Log33

= 1+ (3.3) x 1,5185139398779

= 1+ 5,0110960015970

= 6, 0110960015970

= 6

Interval of Temporary $= \frac{R}{K} = \frac{45}{6}$

= 7.5 = 8

So, the range of score was 45, the class interval was 6, and interval of temporary was 8. It was presented using frequency distribution in the following table:

Table 6.19 Frequency Distribution of the Post test Score of the Control Group

Class (k)	Interval (I)	Frequency (F)	Mid Point	The Limitation of Each Group	Frequency Relative (%)	Frequency Cumulative (%)
1	70-75	1	72.5	69.5-75.5	3.030	100
2	64-69	5	66.5	63.5-69.5	15.152	96.97
3	58-63	3	60.5	57.5-63.5	9.091	81.818
4	52-57	5	54.5	51.5-57.5	15.152	72.727
5	46-51	6	48.5	45.5-51.5	18.181	57.575
6	40-45	8	42.5	39.5-45.5	24.242	39.394
7	34-39	4	36.5	33.5-39.5	12.122	15.152
8	28-33	1	30.5	27.5-33.5	3.030	3.030
Total		**∑F = 33**			**∑P = 100**	

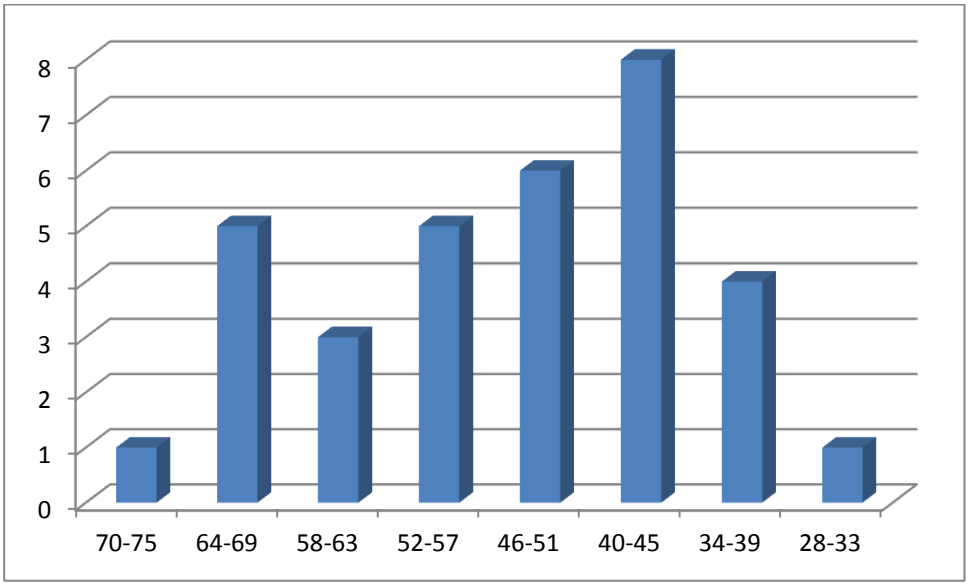

Figure 6.4 The Frequency Distribution of Post Test Score of the Control Group

It can be seen from the figure above, the students' posttest score in experimental group. There was one student who got score 70-75. There were five students who got score 64-69. There were three students who got score 58-63. There were five students who got score 52-57. There were six students who got score 46-51. There were eight students who got score 40-45. There were four students who got score 34-39. And there was one student who got score 28-33.

Table 6.20 Classification of the Students' Speaking Skill in the Post-test of the Control Group.

Rating	Scale	Classification	Frequency	Percentage
81-100	5	Very good	0	0 %
61-80	4	Good	6	18.18%
41-60	3	Fairly good	20	60.61%
21-40	2	Poor	7	21.21%
0-20	1	Very poor	0	0 %

In the table above, there were 33 students observed in this research before given treatment in experiment group. From all of the students observed, there was no student (0 %) who got very good score, there were 6 students (18.18 %) who got good scores, there were 20 students (60.61%) who got fairly good, there were 7 students (21.21%) who got poor scores, and there was no student (0 %) who got very poor scores.

The next step, the researcher tabulated the scores into the table for the calculation of mean, median, and modus as follows:

Table 6.21 The Table for Calculating Mean of Post Test Score of the Control Group

Interval (I)	Frequency (F)	Mid Point (x)	FX	X'	Fx'	Fkb	Fka
70-75	1	72,5	72,5	4	4	33	1
64-69	5	66,5	332,5	3	15	32	6
58-63	3	60,5	181,5	2	6	27	9
52-57	5	54,5	272,5	1	5	24	14
46-51	6	48,5	291	0	0	19	20
40-45	8	42,5	340	-1	-8	13	28
34-39	4	36,5	146	-2	-8	5	32
28-33	1	30,5	30,5	-3	-3	1	33
	∑F = 33		**∑FX = 1666,5**		**∑FX' = 11**		

a. Mean

$$Mx = \frac{\sum fX}{N}$$

$$= \frac{1666.5}{33}$$

$$= 50.5$$

The calculation above showed of mean value was 50.5 of the post test of the control group.

The last step, the researcher tabulated the scores of pre test of control group into the table for the calculation of standard deviation and the standard error as follows:

Table 6.22 The Table for Calculating Standard Deviation and Standard Error of the Posttest Score

Interval (I)	**Frequency (F)**	**Mid Point (x)**	**FX**	**X'**	**x'²**	**Fx'**	**Fx'²**
70-75	1	72,5	72,5	4	16	4	16
64-69	5	66,5	332,5	3	9	15	45
58-63	3	60,5	181,5	2	4	6	12
52-57	5	54,5	272,5	1	1	5	5
46-51	6	48,5	291	0	0	0	0
40-45	8	42,5	340	-1	1	-8	8
34-39	4	36,5	146	-2	2	-8	16
28-33	1	30,5	30,5	-3	9	-3	9
	∑F = 33		**∑FX = 1666,5**			**∑FX' = 11**	**∑Fx'²= 111**

The last step, the researcher tabulated the scores of pre test of control group into the table for the calculation of standard deviation and the standard error as follows:

b. Standard Deviation

$$SD_4 = \text{i}\sqrt{\frac{\sum fx'^2}{N} - (\frac{\sum fx'}{N})^2}$$

$$SD_4 = 6\sqrt{\frac{111}{33} - (\frac{11}{33})^2}$$

$$SD_3 = 6\ \sqrt{3.36 - (0.33)^2}$$

$$SD_4 = 6\sqrt{3.36 - 0.1089}$$

$$SD_4 = 6\ \sqrt{3.2511}$$

$$SD_4 = 6 \text{ x } 1.80309$$

$$SD_4 = 10.81854$$

c. Standard Error

$$\text{SEm}_4 = \frac{SD_2}{\sqrt{N_2 - 1}}$$

$$\text{SEm}_4 = \frac{10.81854}{\sqrt{33 - 1}}$$

$$\text{SEm}_4 = \frac{10.81854}{\sqrt{32}}$$

$$\text{SEm}_4 = \frac{10.81854}{5.65685}$$

$SEm_4 = 1.912468$

The result of calculation showed that the standard deviation of post test score of control group was =10.81854 and the standard error of post test score of control group was =1.912468

The researcher also calculated the data calculation of post test score of control group using SPSS V 20.0 program. The result of statistic table is as follows:

Table 6.23 The Frequency Distribution of the Post Test Scores of the Control Group Using SPSS V 20.0 Program.

posttest_control

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20	1	3.0	3.0	3.0
	35	1	3.0	3.0	6.1
	38	1	3.0	3.0	9.1
	39	2	6.1	6.1	15.2
	40	4	12.1	12.1	27.3
	41	1	3.0	3.0	30.3
	42	1	3.0	3.0	33.3
	43	2	6.1	6.1	39.4
	45	5	15.2	15.2	54.5
	47	1	3.0	3.0	57.6
	50	3	9.1	9.1	66.7
	58	1	3.0	3.0	69.7
	59	1	3.0	3.0	72.7
	60	2	6.1	6.1	78.8
	62	4	12.1	12.1	90.9
	63	1	3.0	3.0	93.9
	68	1	3.0	3.0	97.0
	70	1	3.0	3.0	100.0
	Total	33	100.0	100.0	

The table above showed the result of post test scores achieved by the control group using SPSS program. It could be seen that there was one student who got score 20 (3.0%). One student who got score 35 (3.0%). One student who got score 38 (3.0%). Two students who got score 39 (6.1%). Four students who got score 40 (12.1%). One student who got score 41 (3.0%). One student who got score 42 (3.0%). Two students who got score 43 (6.1%). Five students who got score 45 (15.2%). One student who got score 47 (3.0%). Three students who got score 50 (9.1%). One student who got score 58 (3.0%). One student who got score 59 (3.0%). Two students who got score 60 (6.1%). Four students who got score 62 (12.1%). One student who got score 63 (3.0%). One student who got score 68 (3.0%). And one student who got score 70 (3.0%).

The next step, the researcher calculated the score of mean, median, mode, Standard deviation, and standard error of mean of post-test in control group as follows:

Table 6.24 The Table of Calculation of Mean, Standard Deviation, and Standard Error of Mean of Post-Test Score in Control Group Using SPSS V 20.0 Program

Statistics

posttest_control

N	Valid	33
	Missing	0
Mean		48.73
Std. Error of Mean		1.958
Median		45.00
Mode		45

Std. Deviation	11.248
Minimum	20
Maximum	70
Sum	1608

The table showed the result of mean calculation was 48.73. The result of standard deviation was 11.248. The result of standard error of mean calculation was 1.958.

B. The Result of test

In this study, The writer chose the significance level on 5%, it means the significance level of refusal of null Hypothesis on 5%. The writer decided the significance level at 5% due to the Hypothesis type stated on non-directional (two-tailed test). It meant that the Hypothesis cannot direct the prediction of alternative Hypothesis.

To test the hypothesis of the study, the writer used t-test statistical calculation. Firstly, the writer calculated the Standard deviation and the 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:

Table 4.1. The Standard Deviation and Standard Error of X_1 and X_2

Variable	The Standard Deviation	The Standard Error
X_1	11.8587	2.1651027
X_2	10.81854	1.912468

Where:

X_1 = Experimental Group

X_2 = Control Group

The table showed the result of the standard deviation calculation of X_1 was 11.8587 and the result of the standard error mean calculation was 2.1651027. The result of the standard deviation calculation of X_2 was 10.81854 and the result of the standard error mean calculation was 1.912468.

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

$$SE_{M1} - SE_{M2} = \sqrt{SEm1^2 + SEm2}^2$$

$$SE_{M1} - SE_{M2} = \sqrt{2.1651027^{\ 2} + 1.912468^2}$$

$$SE_{M1} - SE_{M2} = \sqrt{4.6876697 + 3.65753385}$$

$$SE_{M1} - SE_{M2} = \sqrt{8.34520355}$$

$$SE_{M1} - SE_{M2} = 2.8888066$$

$$SE_{M1} - SE_{M2} = 2.889$$

The calculation above showed the standard error of the differences mean between X_1 and X_2 was 2.889. Then, it was inserted to the t_o formula to get the value of t observe as follows:

$$t_o = \frac{M1 - M2}{SEm1 - SEm2}$$

$$t_o = \frac{56.370 - 50.5}{2.889}$$

$$t_o = \frac{5.87}{2.889}$$

$$t_o = 2.031844$$

$$t_o = 2.0312$$

With the criteria:

If t-test (t-observed) ≥ t-table, Ha is accepted and Ho is rejected.

If t-test (t-observed) < t-table, Ha is rejected and Ho is accepted

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

$$df = (N_1+N_2) - 2$$

$$= (31 + 33) - 2$$

$$= 62$$

t_{table} at df 66/60 at 5% significant level = 2.000

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

Table 4.2. The Result of T-test

Variable	T observed	T table		Df/db
		5%	1%	
X_1-X_2	2.0312	2.000	2.660	62

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< 2.0312< 2.660. It meant H_a was accepted and H_o was rejected.

It could be interpreted based on the result of calculation that H_a stating that there is significant effect of using Communicative language teaching (CLT) method toward students' speaking skill at the eleventh grade students in SMA Muhammadiyah Palangka Raya was accepted and Ho stating that There is no significant effect of using Communicative language teaching (CLT) method toward students' speaking skills at the eleventh grade students in SMA Muhammadiyah Palangka Raya was rejected. It meant that teaching speaking by Communicative language teaching (CLT) method improves the eleventh grade students' speaking score in SMA Muhammadiyah Palangka Raya.

The writer also applied SPSS V 22.0 program to calculate t test in testing hypothesis of the study. The result of t test using SPSS V 22.0 was used to support the manual calculation of the t test. The result of the t test using SPSS V 22.0 program could be seen as follows:

Table 4.3 The Standard Deviation and the Standard Error of X_1 and X_2 Group Statistics

Group Statistics

GROUP		N	Mean	Std. Deviation	Std. Error Mean
SCORE	X1	31	56.48	12.495	2.244
	X2	33	50.39	11.155	1.942

The table showed the result of the standard deviation calculation of X_1 was 12.495 and the result of the standard error mean calculation was 2.244. The result of the standard deviation calculation of X_2 was 11.155 and the standard error mean calculation was 1.942.

Table 4.4. The Calculation T-test Using SPSS V 22.0 Independent Sample Test

Independent Samples Test

		Levine'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
SCORE	Equal variances assumed	.003	.955	2.059	62	.044	6.090	2.957	.179	12.001
	Equal variances not assumed			2.052	60.136	.045	6.090	2.968	.154	12.026

The table showed the result of t test calculation using SPSS V 22.0 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 2.059, the result of mean difference between experimental and control group was 6.090.

To examine the truth or the false. The result of degree of freedom (df) was 62, it found from the total number of the students in both group minus 2. The following table was the result of $t_{observed}$ and t_{table} from 62 df at 5% and 1% significance level.

Table 4.5. The Result of t-Observed and T-Table/T-Test

Variable	T observed	T table		Df/db
		5%	1%	
X_1-X_2	2.059	2.000	2.660	62

The interpretation of the result of t-test using SPSS V 22.0 Program, it was found the t observe was lower than the t table at 1% but greater than 5% significance level or 2.000 < 2.059 < 2.660. it could be interpreted based on the result of calculation that H_a stating that There is significant effect of using Communicative language teaching (CLT) method toward students' speaking skills at the eleventh grade students in SMA Muhammadiyah Palangka Raya was accepted and Ho stating that There is no significant effect of using Communicative language teaching (CLT) method toward students' speaking skills at the eleventh grade students in SMA Muhammadiyah Palangka Raya was rejected.

C. Discussion

In this study, the result of t test calculation using SPSS V 22.0 found that Communicative language teaching (CLT) method gave significant effect on the students' English scores (speaking skills). It proved by the value df $T_{observed}$ was

greater than T_{table} at 5% but lower at 1% significance level or 2.000 < 2.059 < 2.660.

Based on the results finding of the study, it was shown that the Role Play as one of Communicative language teaching (CLT) technique that has been chosen by the writer, gives beneficial contribution in increasing the students' speaking achievement and students' speaking performance during the instructional process. Role Play technique implemented in this study consists of some steps. Those are; 1) deciding on the school syllabus and material, 2) organizing the group of the students, 3) providing the situation to be role played, 4) teaching the example dialogue for role play, 5) guiding the students to pronounce the expression used correctly and explaining the purpose, 6) having the students practiced the role play, 7) having the students modified the situation, and 8) having the students performed the dialogue in front of the class.

Although based on statistical calculation interpreted that the alternative hypothesis stating that there is significant effect of using Communicative language teaching (CLT) method toward students' speaking skills at the eleventh grade students in SMA Muhammadiyah Palangka Raya, but there were some students still classify as poor in speaking. The reason of this fact is the increasing of students score mostly taken place in fluency, but in grammar and pronunciation they still have many difficulties. They got more confidences from Role Play so that is why their fluency in speaking is increasing. It is in line with Richard's statement in chapter II, pg. 34 as he stated that "One of the goals of CLT is to develop fluency in language use". There are also some problems faced by the writer when the CLT

implemented. First, the writer did not have opportunities to increase other criteria such as grammar, vocabulary and pronunciation because the school is almost close to school examination while Role Play itself need full management of time. The length of time spent in Role Play may influence its success or failure, whereas in this study the writer just could conduct 4 meetings. So it was impossible for the writer to conduct an addition treatment or post-test repetition. Second, the writer did not have co-teaching to monitor the students' behavior individually as this engenders feelings of inadequacy among the students in teaching practice. The problems faced related to the disadvantages of Role play on chapter II, pg. 38.

Nevertheless, Role Play is appropriate for eleventh grade students of SMA Muhammadiyah Palangka Raya. Based on statement above it is appropriate because in Communicative language teaching (CLT) method, the students can facilitate their own learning by creating their own role play through either scripted or improvised work.