

BAB IV

FINDINGS AND DISCUSSION

This chapter presents: (4.1) findings and; (4.2) interpretations.

4. 1 FINDINGS

4. 1. 1 Students Categories Pretest Scores in Control Group

In distribution of data frequency the interval score, frequency and percentage were presented. The result of the pretest scores in control group is decribed in table 9 below:

Table 9: Frequency Data of Student's Pretest Score in Control Group

Score	Frequency	Percent
28.00	1	3.6
30.00	5	17.9
36.00	1	3.6
38.00	3	10.7
40.00	5	17.9
42.00	1	3.6
44.00	2	7.1
46.00	3	10.7
50.00	6	21.4
62.00	1	3.6
Total	28	100.0

Based on the table above, it was found that there were one student (3.6%) who got 28, five students (17.9%) got 30, one student (3.6%) got 36, three students (10.7%) got 38, five students (17.9%) got 40, one student (3.6%) got 42,

two students (7.1%) got 44, three students (10.7%) got 50, six students (21.4%) got 50, and one student (3.6%) got 62.

Furthermore, there were 3 categories of students' speaking score. The classification speaking the students' posttest score in experimental group can be seen from following table 9 below:

Table 9. Speaking Categories Students' Pretest Score in Control Group

Score Interval	Categories	Frequency	Percentage
67-100	High	1	3.6 %
34-66	Average	12	42.7 %
0-33	Low	15	53.7%

Based on the table above, it was found that the total number of sample was 28 students. There were fifteen students (53.7%) in low category, twelve students (42.7%) in average category, and one student (3.6%) in high category.

4.1.2 Students Categories Posttest Scores in Control Group

In distribution of data frequency, the result of the posttest scores in control group is described in table 10 below:

Table 10: Frequency Data of Student's Posttest Score in Control Group

Score	Frequency	Percent
30.00	3	10.7
32.00	1	3.6
38.00	1	3.6
40.00	5	17.9
41.00	1	3.6
42.00	3	10.7
44.00	1	3.6
52.00	1	3.6
53.00	1	3.6

54.00	1	3.6
58.00	1	3.6
60.00	7	25.0
78.00	2	7.1
Total	28	100.0

Based on the table above, it was found that there were three students (10.7%) who got 30, one student (3.6%) got 32, one student (3.6%) got 38, five students (17.9%) got 40, one student (3.6%) got 41, three students (10.7%) got 42, one students (3.6%) got 44, one students (3.6%) got 52, one students (3.6%) got 53, one students (3.6%) got 54, one students (3.6%) got 58, seven students (25%) got 60 and two students (7.1%) got 78.

Furthermore, there were 3 categories of students' speaking score. The classification speaking the students' posttest score in experimental group can be seen from following table 10 below:

Table 10. The Classification of Speaking Categories Students' Pretest Score in Control Group

Score Interval	Categories	Frequency	Percentage
67-100	High	19	35.7 %
34-66	Average	8	28.7%
0-33	Low	10	35.6 %

Based on the table above, it was found that the total number of sample was 28 students. There were ten students (35.6%) in low category, eighth students (28.7%) in average category, and nineteen students (35.7%) in high category.

4.1.3 Students Categories Pretest Scores in experimental Group

In distribution of data frequency the interval score, frequency and percentage were presented. The result of the pretest scores in experimental group is described in table 5 below:

Table 5: Frequency Data of Student's Pretest Score in Experimental Group

Score	Frequency	Percentage
30.00	5	17.9
34.00	1	3.6
36.00	2	7.1
38.00	2	7.1
40.00	5	17.9
42.00	4	14.3
44.00	4	14.3
46.00	1	3.6
48.00	1	3.6
50.00	2	7.1
62.00	1	3.6
Total	28	100.0

Based on the table above, it was found that there were five students (17.9%) who got 30, one student (3.6%) got 34, two students (7.1%) got 36, two students (7.1%) got 38, five students (17.9%) got 40, four students (14.3%) got 42, four students (14.3%) got 46, one student (3.6%) got 46, one student (3.6%) got 48, two students (7.1%) got 50, one student (3.6%) got 62. Furthermore, there were 3 categories of students' speaking score. The classification speaking the students' pretest score in experimental group can be seen from following table below:

Table 11. The Classification of Speaking Categories Students' Pretest Score in Experimental Group

Score Interval	Categories	Frequency	Percentage
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67-100	High	1	3.6 %
34-66	Average	12	42.8 %
0-33	Low	15	53.6 %

Based on the table above, it was found that the total number of sample was 28 students. There were fifteen students (53.6%) in low category, twelve students (42.8%) in average category, and one student (3.6%) in high category.

4.1.4 Students Categories Pretest Scores in experimental Group

In distribution of data frequency, the result of the posttest scores in experimental group is described in table 7 below:

Table 12 : Frequency Data of Student's Posttest Score in Experimental Group

Scores	Frequency	Percent
38.00	1	3.6
40.00	4	14.3
42.00	3	10.7
44.00	2	7.1
46.00	2	7.1
52.00	4	14.3
54.00	3	10.7
56.00	1	3.6
60.00	2	7.1
62.00	1	3.6
64.00	4	14.3
70.00	1	3.6
Total	28	100.0

Based on the table above, it was found that there were one student (3.6%) who got 38, four students (14.3%) got 40, three students (10.7%) got 42, two students (7.1%) got 44, two students (7.1%) got 46, four students (14.3%) got 52,

three students (3.6%) got 56, two students (7.1%) got 60, one student (3.6%) got 62, four students (14.3%) got 64, one student (3.6%) got 70.

Furthermore, there were 3 categories of students' speaking score. The classification speaking the students' posttest score in experimental group can be seen from following table 8 below:

Table 8. The Classification of Speaking Categories Students' Pretest Score in Experimental Group

Score Interval	Categories	Frequency	Percentage
67-100	High	9	32.2 %
34-66	Average	14	49.9 %
0-33	Low	5	17.9 %

Based on the table above, it was found that the total number of sample was 28 students. There were five students (17.9%) in low category, fourteen students (49.9%) in average category, and nine students (32.2%) in high category.

4.1. 5 Normality Test

Normality test was done to know whether the result of the students' posttest in control and experimental group were normal or not. The data could be classified into normal when the p-output was higher than mean significant difference 0.005. In measuring normality test. *1-sample kolmogronov Smirnov* was used.

4.1.5.1 Normality Test of the Posttest Scores in Control Group

The computations of normality used the computation in SPSS 22.

The result of analysis is figured out in table below:

One-Sample Kolmogorov-Smirnov Test

		Postcontrl category
N		28
Normal Parameters ^{a,b}	Mean	48.6154
	Std. Deviation	13.54718
Most Extreme Differences	Absolute	.187
	Positive	.187
	Negative	-.107
Test Statistic		.187
Asymp. Sig. (2-tailed)		.009 ^c

a. Test distribution is Normal.

b. Calculated from data.

4.1.5 1 Normality Test of the Posttest Scores in experimental Group

The computations of normality used the computation in SPSS 22. The result of analysis is figured out in table below:

One-Sample Kolmogorov-Smirnov Test

		PostEksprmntl_category
N		28
Normal Parameters ^{a,b}	Mean	48.6154
	Std. Deviation	13.54718
Most Extreme Differences		Absolute .187

	Positive	.187
	Negative	-.107
Test Statistic		.187
Asymp. Sig. (2-tailed)		.0149 ^c

a. Test distribution is Normal.

b. Calculated from data.

4.1.5.2 Normality Test of the Posttest Scores in Control and Experimental Group

The computations of normality used the computation in SPSS 22. The result of analysis is figured out in table below:

One-Sample Kolmogorov-Smirnov Test

		Ss_Scoreposttest	Category (low, average and high)
N		56	56
Normal Parameters ^{a,b}	Mean	49.8545	1.5000
	Std. Deviation	11.55088	.50452
Most Extreme Differences	Absolute	.152	.339
	Positive	.152	.339
	Negative	-.101	-.339
Test Statistic		.152	.339
Asymp. Sig. (2-tailed)		.003 ^c	.000 ^c

a. Test distribution is Normal.

b. Calculated from data.

Table 12. Result Analysis in Measuring Normality Test Students' Posttest in Control and Experimental Group using 1-Sample Kolmogorov Smirnov Test

No	Students' Prettest	N	Klomogronov Smirnov	Sig.	Result
1	Control Group	28	0.193	0.009	Normal
2	Experimental Group	28	0.143	0.149	Normal

Additionally, the analysis in normality test was also done to students' posttest score in control and experimental groups. Based on the analysis, it was found that the Kolmogorov-Smirnov test of the students' pretest score in control group was 0.193 and experimental group was 0.143. It can be assumed that the score from pretest in control and experimental group were categorized normal since the p-output was higher than mean significant different 0.05. The result of analysis was figured out in table below:

4.1.6 Homogeneity Test

In homogeneity test, the total of sample, Kolmogorov-Smirnov Z, significant, and the result were analyzed. The scores were got from: (a) students posttest score in control and experimental groups. The data are considered homogeneous whenever it is higher than 0.05.

4.1.6.1 Student's Posttest Score In Control and Experimental Groups

Secondly, the calculation result measuring homogeneity test to students' posttest score in control and experimental group. It was found that the significance level of homogeneity test of the students' pretest score in control and experimental group was 4.758. From the scores, it could be stated that the obtained data is homogenous, because it is higher than 0.05. The statistics calculation of normality can be seen in table 14.

Table 14. The Result Analisis in Meansuring Homogeneity Test of Students' in Posttest in Control and Experimental Groups using Levene Statistic.

Test of Homogeneity of Variances					
		Levene Statistic	df1	df2	Sig.
Ss_Scoreposttest categories	Based on Mean	4.758	1	53	.034
	Based on Median	2.450	1	53	.123
	Based on Median and with adjusted df	2.450	1	41.474	.125
	Based on trimmed mean	4.492	1	53	.039

4.1.7 Result Analysis in Measuring Significant Difference in Control and Experimental Groups

To know the significant difference of the speaking ability on the students who using Twins Strategy and those who are not, an independent sample t-test was used for testing students' posttest scores in experimental group and posttest in control group. The significant difference is accepted whenever the p-output (Sig. 2-tailed) is lower than 0.05 and t-obtained is higher than t-table (2.015). While the significant difference is rejected when the p-output (Sig.2-tailed) is higher than 0.05 than t-value is lower than t-table (2.015).The further calculation of the independent sample t-test was displayed in the table 16 below:

Table 16. Result Analysis of independent Sample T-Test from students' posttest Scores in Control and Experimental Groups

Posttest	Independent Sample t-test

	Mean	Df	T	Sig. (2-tailed)	Ho	Ha
(Control- Experimental)	48.7143	54	3.016	0.004	Rejected	Accepted

From table, it can be seen that the p-output was 0.004 and the value of t-obtained was 3.016. since the p-output was lower than 0.05. it can be stated that there was significant difference on students' speaking ability scores taught by twins strategy and those who are not at MTS N 1 Palembang.

4.1.8. Result analysis in Measuring Interaction Effects of Low, Average and High Scores in Control and Experimental Groups

In this research, two-way ANOVA was used to measure significant interaction effects on students' speaking scores in low, average and high categories between those who are taught by Twins Strategy and those who are not at MTS N 1 Palembang. The analysis result of two-way ANOVA was figure out in table below:

**Table : Result Analysis in Measuring Significant Interaction Effects
Using Two-way ANOVA**

Tests of Between-Subjects Effects

Dependent Variable: score posttest

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
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Corrected Model	1089.994 ^a	3	363.331	2.759	.000
Intercept	68149.880	1	68149.880	517.505	.000
Twins_Strategy	93.011	1	93.011	.706	.405
Speaking_categories	.187	1	1.187	1.768	.280
Twins_Strategy * Speaking_categories	41.707	1	41.707	5.366	.007
Error	6847.845	52	131.689		
Total	134573.000	56			
Corrected Total	7937.839	55			

a. R Squared = .137 (Adjusted R Squared = .818)

The statistical analysis in Measuring Significant interaction effects using two-way ANOVA found that the p-output is 0.007. from the p-output it can be stated that there are significant interaction effects of low, average ad high on speaking taught using twins strategy because the p-output was lower than 0.024.

Based on analysis of two-way ANOVA from students' posttest scores in control group with 28 students' and experimental group with 28 students in (Low, Average and High) categories. It could be seen that there were 20 students includes in high category, 18 students include average category and 18 students include low category.

The result can be stated that there is significant interaction effects on students' speaking score in low, average and high categories between those thus who were taught by twins strategy and those who are not at MTS N 1 Palembang. From the scores, it can be stated that the teaching speaking using twins strategy can

improve students' speaking in low, average and high categories and those who are not.

4.2 Discussions

In order to strengthen the value of this study the interpretations are made based on the result of data analyses. First, I gave the treatment by using twins strategy was given to experimental group while the control group was taught by their English teacher method(s). Based on the result of paired sample t-test on the pretest and posttest in experimental group, the t-obtained exceeded t-table and p-output was lower than p-value. It means that strategy can improve the students speaking. Therefore, the students got higher score after the treatment. Hofman and Dijskrta informed that the improvement of the school and the student achievement have been in positive ways linked to teacher professional learning communities (as cited in Muazzomi, 2017, p. 13). Second, based on the independent sample t-test on posttest results in experimental and control group, it was found that the t-obtained was higher than t-table and p-output was lower than p-value. It means that there was a significant difference on the students who are taught by using twins strategy and those who were not. The implementation of that strategy in experiment group made the students get more knowledge, know about new vocabulary and made simple sentences from it. Cruz (2001) explains that the Twins strategy as an ancient oral art can demonstrate the power of words.

There were factors showed the reason why twins strategy could improve students' speaking skill at MTS N 1 Palembang especially VIII E. first, twins

strategy could make the students who were accustomed to using English in their real life communication especially in their conversation class because they got many new vocabularies and they can make some sentences and dialogues by themselves. Second, the students could apply the conversation in the class. It means that the students might apply the conversation with others in the class or their real daily life. Third, the students were interested and fun in learning English especially in speaking skill. They showed their contribution and participated well in teaching and learning process by describing a picture and spoke with their partner during the class.

Compared to the students from the experimental group, the students in the control group were given a pretest and posttest only without the treatment by using twins strategy. However, they were still taught by the teacher of English at MTS N 1 Palembang. The findings show that students in control group also had significant difference, the teacher gave a good explanation and contribution for students about English especially speaking skill. Meanwhile, the students in control group also have a significant but not as significant as the experimental group.

Twins Strategy has emerged as one such teaching method that has proven to be an effective teaching pedagogy and learning process (Eck, 2006). The result is supported by the study conducted by Purwatiningsih (2015) revealed that improving speaking ability through describing of the picture by using twins strategy in the English teaching and learning process of speaking was effective to improve the students' speaking skills. The students made a good improvement a fluency aspect during the speaking process. Moreover, their motivation and enthusiasm in

learning English were also improved. Data showed the means of the students' speaking scores in pre-test and post-test was improved.

According to Klippel (1985), Twins is a strategy that helps students when they are speaking. The students need to speak about their pictures as aim to speak and it is expected not to be stressful for them because they are given activity in a form of strategy and the teacher also can improve cooperation within partners. Phaiboonnungulkij (2014) also found that twins strategy improving speaking ability and teachers can use describing of the pictures as a teaching tool. There are some benefits of using picture. Gerlach and Elly (1980) state that teaching speaking using twins has some benefits in learning process. It implies that teacher can use picture as media to create students' motivation and also make them active in the class. In addition, Wright (1990) states that Media including pictures in the classroom so that students will have stimulus for their development. Hastomo (2013) also indicated that the implementation of Twins Strategy was effective to improve the students' speaking ability. Another expert Sanchez (2007), states that the Twin Strategy is one of interactive games in the teaching and learning process of a foreign language. In the beginning the implementation of picture series, the students were confused at first but in the next meeting, they seemed enjoy the activity. From the explanation above, it can be concluded that describing of the picture by using Twins strategy was effective in improving the students' speaking ability and it was very influential for teaching speaking on the eighth-grade students of MTS 1 Palembang.

