CHAPTER IV

FINDINGS AND DISCUSSION

In this chapter, the researcher presents discussion about research findings, hypothesis testing and discussions of the research findings.

A. Research Findings

The researcher presented the research data from the seventh grade students of MTs Al Huda Bandung on grammar mastery when they were taught by using STAD Technique and without using STAD Technique. The researcher used quosi experimental research design with quantitative approach. The researcher used two classes in seventh grader to conduct the research. The data of this research were pre-test scores and pos-test scores of experimental group and control one. The researcher showed the data pre-test and post test of experimental group below:

Table 4.1
Statistical data of pre-test score in the experimental group

Statistics

grammar_score

N	Valid	29
	Missing	2
Mean		32.8276
Std. Error of Mean		1.09305
Median		33.0000
Mode		33.00
Std. Deviation		5.88624
Variance		34.648
Range		23.00
Minimum		20.00
Maximum		43.00
Sum		952.00

Table 4.2
Statistical Data of post-test score in the experimental group

Statistics

grammar_score

N	Valid	29
	Missing	2
Mean		78.3793
Std. Error of Mean		1.86847
Median		80.0000
Mode		87.00
Std. Deviation		1.00620E1
Variance		101.244
Range		37.00
Minimum		50.00
Maximum		87.00
Sum		2273.00

The table above showed the mean of pre-test was 32.8276 and in post-test improved to be 78.3793. The median in pre-test was 33.0000 and in post-test was 80.0000. The mode in pre-test was 33.00 and in post-test was 87.00. The standard deviation in pre-test was 5.88624 and in post-test was 1.00620E1. 'E' in standard deviation means Scientific Notation or numeric data for multiple of ten (https://idtesis.com/pengenalan-spss/). The range in pre-test was 23.00 and in post-test 37.00. The minimum score in pre-test was 20.00 and in post-test was 50. The maximum score in pre-test was 43.00 and in post-test was 87.00. The summary of pre-test was 952.00 and in post-test was 2273.00. In addition, the researcher organized

the percentage and the frequency of the pre-test and post-test. It can be seen in the table below:

Table 4.3
Frequency of pre-test score of Experimental group

grammar_score

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20	2	6.5	6.9	6.9
	27	3	9.7	10.3	17.2
	30	7	22.6	24.1	41.4
	33	8	25.8	27.6	69.0
	37	4	12.9	13.8	82.8
	40	2	6.5	6.9	89.7
	43	3	9.7	10.3	100.0
	Total	29	93.5	100.0	
Missing	System	2	6.5		
Total		31	100.0		

In the table above, 2 students or 6.5% got 20, 3 students or 9.7% got 27, 7 students or 22.6% got 30, 8 students or 25.8% got 33, 4 students or 12.9 % got 37, 2 students or 6.5% got 40, 3 students or 9.7% got 43.

Table 4.4
Frequency of post-test score of Experimental group

grammar_score

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	50	1	3.2	3.4	3.4
	53	1	3.2	3.4	6.9
	57	1	3.2	3.4	10.3
	70	2	6.5	6.9	17.2
	73	1	3.2	3.4	20.7
	77	4	12.9	13.8	34.5
	80	7	22.6	24.1	58.6
	83	3	9.7	10.3	69.0
	87	9	29.0	31.0	100.0
	Total	29	93.5	100.0	
Missing	System	2	6.5		
Total		31	100.0		

After got the treatment, the students improved their results in the post-test. Their results were 1 student or 3.2% got 50, 1 student or 3.2% got 53, 1 student or 3.2% got 57, 2 students or 6.5% got 70, 1 student or 3.2% got 73, 4 students or 12.9% got 77, 7 students or 22.6% got 80, 3 students or 9.7% got 83, 9 students or 29.0% got 87.

After got the result of the pre-test and post-test control group, the researcher showed the data below:

Table 4.5
Statistical data of pre-test score in the control group

Statistics

grammar_score

N	Valid	25
	Missing	0
Mean		33.8000
Std. Error of Mean		1.30894
Median		37.0000
Mode		37.00
Std. Deviation		6.54472
Variance		42.833
Range		20.00
Minimum		23.00
Maximum		43.00
Sum		845.00

Table 4.6
Statistical data of post-test score in the control group

Statistics

grammar_score

N	Valid	25
	Missing	0
Mean		53.2800
Std. Error of Mean		2.34273
Median		53.0000
Mode		50.00[a]
Std. Deviation		1.17137E1
Variance		137.210
Range		50.00
Minimum		30.00
Maximum		80.00
Sum		1332.00

a. Multiple modes exist. The smallest value is shown

Based on the table above showed the mean of pre-test was 33.8000 and in the post-test was 53.2800. The median of pre-test was 37.0000 and in the post-test was 53.0000. The mode of pre-test was 37.00 and in the post-test was 50.00[a]. There was ([a]) in the mode, it means the value was multiple modes exist. The standard deviation of pre-test was 6.54472 and in the post-test was 1.17137E1. 'E' in standard deviation means Scientific Notation or numeric data for multiple of ten (https://idtesis.com/pengenalan-spss/). The range of pre-test was 20.00 and in the post-test was 50.00. The minimum score in the pre-test was 23.00

and in the post-test was 30.00. The maximum score in the pre-test was 43.00 and in the post-test was 80.00. The summary of pre-test was 845.00 and in the post-test was 1332.00. In addition, the researcher organized the percentage and the frequency of the pre-test and post-test. It can be seen in the table below:

Table 4.7
Frequency of pre-test score of Control group

grammar_score

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	23	2	8.0	8.0	8.0
	27	6	24.0	24.0	32.0
	30	2	8.0	8.0	40.0
	33	2	8.0	8.0	48.0
	37	7	28.0	28.0	76.0
	40	2	8.0	8.0	84.0
	43	4	16.0	16.0	100.0
	Total	25	100.0	100.0	

In the table above, 2 students or 8.0% got 23, 6 students or 24.0% got 27, 2 students or 8.0% got 30, 2 students or 8.0% got 33, 7 students or 28.0% got 37, 2 students or 8.0% got 40, 4 students or 16.0% got 43.

Table 4.8

Frequency of post-test score of Control group

grammar_score

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	30	1	4.0	4.0	4.0
	37	2	8.0	8.0	12.0
	43	2	8.0	8.0	20.0
	47	3	12.0	12.0	32.0
	50	4	16.0	16.0	48.0
	53	3	12.0	12.0	60.0
	57	4	16.0	16.0	76.0
	60	1	4.0	4.0	80.0
	63	1	4.0	4.0	84.0
	67	2	8.0	8.0	92.0
	77	1	4.0	4.0	96.0
	80	1	4.0	4.0	100.0
	Total	25	100.0	100.0	

In the table above, 1 student or 4.0% got 30, 2 students or 8.0% got 37, 2 students or 8.0% got 43, 3 students or 12.0% got 47, 4 students or 16.0% got 50, 3 students or 12.0% got 53, 4 students or 16.0% got 57, 1 student or 4.0% got 60, 1 student or 4.0% got 63, 2 students or 8.0% got 67, 1 student or 4.0% got 77, 1 student or 4.0% got 80.

Table 4.9

Descriptive Group Statistics

Group Statistics

	group	N	Mean	Std. Deviation	Std. Error Mean
grammar_score	experimental_group	29	78.3793	10.06200	1.86847
	control_group	25	53.2800	11.71367	2.34273

Based on the table above, it showed that the mean of post-test in experimental group was higher than the mean in control one. It can be said the use of STAD technique had impact on students' grammar mastery.

B. Hypothesis Testing

The hypothesis testing of this study as follows:

1. If the significance level is less than 0.05, the alternative hypothesis (H1) is can not be rejected and null hypothesis (Ho) is rejected. It means STAD Technique is effective to be used in teaching grammar for seventh grade students.
2. If the significance level is more than 0.05, the null hypothesis (H1) is can not be rejected and alternative hypothesis (H1) is rejected. It means STAD Technique is not effective to be used in teaching grammar for seventh grade students.

Table 4.10

Result of t-test

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
grammar_score	Equal variances assumed	.685	.412	8.472	52	.000	25.09931	2.96265	19.15431	31.04431
	Equal variances not assumed			8.376	47.700	.000	25.09931	2.99659	19.07328	31.12534

From the table above, it shown F=0.685 (p=0.412) and it is higher than 0.05, so it means that there is no difference in variance data both the experimental group and control one. It can be said the data was homogeneous. The analysis of the homogeneity revealed that both of groups had the same variances, so the information from *Equal Variances Assumed* was used to interpret the T-test result. Meanwhile, the way to test whether the null hypothesis can be rejected was by comparing p-value (Sig. 2 tailed) with the standard level of significance 0.05. Based on the table above p-value was less than 0.05 (0.000<0.05). It means the null hypothesis can be rejected. It can be concluded that there was significant

effect of using STAD technique on students' grammar mastery of seventh grade.

C. Discussion

The researcher conducted the study by using quosi-experimental research design. It conducted in two classes, experimental group and control one. Both of experimental and control groups was given pre-test and post-test, but only experimental group was given a treatment. The treatment was STAD Technique. STAD Technique is a technique which is used by the researcher with grouping the students, each group consist of four or five students which able to improve their grammar mastery especially in simple present tense.

Regarding to the research findings, the data were analyzed with the helped of SPSS 16 version. The calculation of the achievement using t-test showed that there was significant difference of students' achievement with and without those who were taught by using STAD technique and those who were not. On the output of t-test showed p-value (Sig. 2 tailed) was 0.000. Because it was lower than 0.05, it can be concluded that there was a significant difference in the students' achievement between the experimental and control groups in mastering grammar. It means that the alternative hypothesis (H1) can not be rejected and the null hypothesis (Ho) was rejected. In other words, STAD Technique is effective to be used

in teaching grammar for seventh grade students especially in simple present tense.

The study was conducted to find out whether there was any significant effect on students' grammar mastery between the experimental and control group after they got different treatment. In another words, the researcher intended to know the effectiveness STAD technique in achievement students' score on grammar.

STAD technique is effective as a technique for teaching grammar because this way the students can discuss with their friends to solve the given grammatical problems. It is also effective to help students motivated in learning grammar. It is supported by Slavin (2005:12), he stated the main idea of STAD is motivating the students to help and support each other in mastering the material that taught by the teacher. It means that the students can not only learn from the teacher but also from their friends in the group. In addition, the previous study conducted by Astuti (2014) showed that STAD technique can improve the practice of reading comprehension by stimulate students to do some practices and also have better behavior for studying and motivating the students. Meanwhile, in this study, the students are being motivated by giving a reward in the end of grammar teaching and learning process.

Based on the result of previous study conducted by Umar (2015), it is proven by good improvement in learning reading of discussion text after implementing Students Team Achievement Division (STAD) technique in

the teaching learning process. Meanwhile, in this study, the researcher found the implementation comprehension of STAD technique was also effective in teaching grammar especially in simple present tense. Although the previous study and this research have differences in term of field but they used the same technique that was STAD and it was effective.

From the explanation above, it can be seen that the implication of STAD technique have impact the students understanding in simple present tense. By using STAD, the students more easy to understand simple present tense. It can be seen from the indicator, the students can identify 'to be', time signal, singular and plural, and the formula of verbal and nominal sentence in simple present tense. It can be seen from the improvement score of students. It supported by Putri (2014) that the using of STAD technique is effective for students in understanding the simple past tense. So, it can be said that STAD technique is effective on students' grammar mastery.

Mngapa stad dapat effective dalam grammar? Karena menggunakan stad siswa dengan mudah dapat memahami spt. In wht way? Hal ini dapat diidentifikaiskan dengan pencapaian indicator siswa dapat mengidentifikasi to be dll. Siswa telah mencapai indicator dari improvement score nya. Hal ini didukung oleh previous study yang menyatana nak ane mbk e sing ngisor dewe. so it can e said that stad technique is effective on students grammar mastery.

dalam kalimat.score in the term of students' got improvement understanding of simple present tense. It can be seen from their improvement score between motivation and achievement. Giving reward to students in teaching grammar using STAD technique aims to provide motivation to students, so their scores can increase. It supported by Slavin (1995) that cooperative learning especially STAD in secondary schools support the motivationalist position that group rewards are essential to the effectiveness of cooperative learning and the use of group rewards enhances the achievement outcomes. Thus, it can be concluded that the implementation of STAD technique was effective on students' grammar mastery especially at seventh grade of MTs Al Huda Bandung.

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