

## **CHAPTER IV**

### **RESEARCH FINDINGS AND DISCUSSION**

This chapter the researcher presents the findings which have been collected during research, and discussion about the data of the research.

#### **A. The Description Of Data**

The aim of the research was to obtain whether there was a significant effect of students' speaking ability taught by using Plus, Minus, Interesting strategy at the first year of State Senior High School 1 Ngunut in academic year 2017/2018. The data of this research were taken from the test.

The data were the students' scores of speaking ability improvement from pre-test to post-test scores of both experimental and control classes. Before giving posttest, the researcher gave pretest to all of the samples in both classes. The speaking result was evaluated by concerning five components: pronunciation, grammar, vocabulary, fluency, and comprehension. Each component had its scores. The effectiveness can be seen from the significant different score of students' speaking ability before and after being taught by using Plus, Minus, Interesting strategy (PMI).

To know the students' mastery whether it was good or not, the researcher gave category as follows : (See table 4.1)

**Table 4.1 Rating Scale**

No.	Range of Score	Grade	Criteria
1.	81-100	A	Excellent
2.	61-80	B	Good
3.	41-60	C	Enough/Fair
4.	0-40	D	Poor

1. The data of experimental class

After conducting pre-test and post-test for experimental class, the researcher obtained the data. The data are as follows:

**Table 4.2 Students' speaking ability score before and after being taught using Plus Minus Interesting Strategy**

No.	Name	Pre-Test Score	Post-Test Score
1.	APP	56	72
2.	ATG	44	64
3.	AMP	60	74
4.	AS	40	60
5.	AAS	40	56
6.	BEP	52	64
7.	CD	52	76
8.	CWM	40	56
9.	DWP	52	80
10.	DST	48	68
11.	DYDA	36	52
12.	FT	52	80
13.	IEGS	40	60
14.	LAHS	52	80
15.	LW	36	52
16.	MSUF	56	76
17.	MVA	44	56
18.	MRA	48	60
19.	NRA	44	60
20.	NPRS	44	64
21.	NTW	56	76
22.	RAM	48	60

23.	RYA	40	52
24.	RRS	36	56
25.	RAH	44	64
26.	SNN	44	68
27.	SLC	44	60
28.	SH	44	56
29.	TUR	60	84
30.	TIS	44	52
31.	TFZ	44	56
32.	YMW	44	56
33.	YR	36	56
34.	YWS	48	60
35.	ZM	40	64

Based on the table 4.2, there were 35 students as sample of the research..

The descriptive statistic of experimental class is as follows:

a. Pre-test of Experimental Class

The researcher used SPSS 16.0 version to know the descriptive statistic and the frequency of students' pre-test in experimental class. The frequency divided into four criterions: excellent, good, enough/fair, poor, (see table 4.1). The result of the calculation is as follows :

**Table 4.3 Descriptive Statistic of Pre-test**

**Descriptive Statistics**

	N	Minimum	Maximum	Sum	Mean	Std. Deviation
Pretest	35	36	60	1608	45.94	6.747
Valid N (listwise)	35					

Based on the table 4.3 above, it showed that the minimum score of pre-test was 36, the maximum score was 60, and the mean was 45.94.

**Table 4.4 The Frequency of Students' Speaking Ability before Taught by Using Plus Minus Interesting**

		Pretest			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	36	4	11.4	11.4	11.4
	40	6	17.1	17.1	28.6
	44	11	31.4	31.4	60.0
	48	4	11.4	11.4	71.4
	52	5	14.3	14.3	85.7
	56	3	8.6	8.6	94.3
	60	2	5.7	5.7	100.0
	Total	35	100.0	100.0	

From the table 4.4, The frequency of pretest score of experimental class after being distributed there are 10 students getting score between 0 – 40, which means that the students' speaking ability was poor, 25 students getting score between 41 – 60 which means that on the students' speaking ability is enough/fair.

There were 4 students who got score 36 (11.4%), 6 students got score 40 (17.1%), 11 students got score 44 (31.4%), 4 students got score 48 (11.4%), 5 students got score 52 (14.3%), 3 students got score 56 (8.6%), 2 students got score 60 (5.7%). The highest frequency was in score 44 (11 students).

a. Post-test of Experimental Class

The researcher used SPSS 16.0 version to know the descriptive statistic and the frequency of students' pre-test in experimental class. The

frequency divided into four criteria: excellent, good, enough/fair, poor, (see table 4.1). The result of the calculation is as follows :

**Table 4.5 Descriptive Statistic of Post-test**

Descriptive Statistics						
	N	Minimum	Maximum	Sum	Mean	Std. Deviation
Posttest	35	52	84	2230	63.71	9.383
Valid N (listwise)	35					

Based on the table 4.5 above, it showed that the minimum score of post-test was 52, the maximum score was 84, and the mean was 63.71.

**Table 4.6 The Frequency of Students' Speaking Ability after Taught by Using Plus Minus Interesting**

Posttest				
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 52	4	11.4	11.4	11.4
56	8	22.9	22.9	34.3
60	7	20.0	20.0	54.3
64	5	14.3	14.3	68.6
68	2	5.7	5.7	74.3
72	1	2.9	2.9	77.1
74	1	2.9	2.9	80.0
76	3	8.6	8.6	88.6
80	3	8.6	8.6	97.1
84	1	2.9	2.9	100.0
Total	35	100.0	100.0	

From the table 4.6, The frequency of posttest score of experimental class after being distributed there are 19 students getting score between 41

– 60, which means that the students' speaking ability was enough/ fair, 15 students getting score between 61 – 80 which means that on the students' speaking ability is good, 1 student getting score between 81 – 100 which means that on the students' speaking ability is excellent.

There were 4 students who got score 52 (11.4%), 8 students got score 56 (22.9%), 7 students got score 60 (20.0%), 5 students got score 64 (14.3%), 2 students got score 68 (5.7%), 1 student got score 72 (2.9%), 1 student got score 74 (2.9%). 3 students got score 76 (8.6%), 3 students got score 80 (8.6%), and 1 student got score 84 (2.9%). The highest frequency was in score 56 (8 students).

## 2. The data of control class

After conducting pre-test and post-test for control class, the researcher obtained the data. The data are as follows:

**Table 4.7 Students' speaking ability score before and after being taught without using Plus Minus Interesting Strategy**

No.	Name	Pre-Test Score	Post-Test Score
1.	DSP	44	48
2.	AEPS	40	52
3.	ANP	44	52
4.	ARS	44	44
5.	CK	40	48
6.	DDP	52	60
7.	DEK	44	48
8.	DAFN	52	60
9.	FA	40	44
10.	FPEL	44	48
11.	FTR	44	48
12.	HEW	48	48
13.	IA	44	48
14.	KAZ	52	52
15.	LTS	40	52

16.	LSNA	44	44
17.	LSS	40	44
18.	MMAAAB	40	44
19.	MAI	48	52
20.	MR	52	40
21.	MRAP	48	44
22.	NS	40	52
23.	NBF	56	64
24.	RAF	48	48
25.	SIM	36	48
26.	SAW	44	56
27.	SW	44	44
28.	SAN	44	56
29.	SAP	40	44
30.	TWK	40	52
31.	TDW	52	52
32.	UA	60	72
33.	VF	40	52
34.	WTP	60	68
35.	YRAS	36	44

Based on the table 4.7, there were 35 students as sample of the research.. The descriptive statistic of control class is as follows

a. Pre-test of Control Class

The researcher used SPSS 16.0 version to know the descriptive statistic and the frequency of students' pre-test in control class. The frequency divided into four criterions: excellent, good, enough/fair, poor, (see table 4.1). The result of the calculation is as follows :

**Table 4.8 Descriptive Statistic of Pre-test**

**Descriptive Statistics**

	N	Minimum	Maximum	Sum	Mean	Std. Deviation
Pretest	35	36	60	1588	45.37	6.131
Valid N (listwise)	35					

Based on the table 4.8 above, it showed that the minimum score of pre-test was 36, the maximum score was 60, and the mean was 45.37.

**Table 4.9 The Frequency of Students' Pre-test in Control Class**  
**Pretest**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	36	2	5.7	5.7	5.7
	40	10	28.6	28.6	34.3
	44	10	28.6	28.6	62.9
	48	5	14.3	14.3	77.1
	52	5	14.3	14.3	91.4
	56	1	2.9	2.9	94.3
	60	2	5.7	5.7	100.0
	Total	35	100.0	100.0	

From the table 4.9, The frequency of pretest score of control class after being distributed there are 12 students getting score between 0 – 40, which means that the students' speaking ability was poor, 23 students getting score between 41 – 60 which means that on the students' speaking ability is enough/fair.

There were 2 students who got score 36 (5.7%), 10 students got score 40 (28.6%), 10 students got score 44 (28.6%), 5 students got score 48 (14.3%), 5 students got score 52 (14.3%), 1 student got score 56 (2.9%), 2 student got score 60 (5.7%). The highest frequency was in score 40 (10 students) and score 44 (10 students).

b. Post-test of Control Class

The researcher used SPSS 16.0 version to know the descriptive statistic and the frequency of students' post-test in control class. The frequency divided into four criterions: excellent, good, enough/fair, poor, (see table 4.1). The result of the calculation is as follows :

**Table 4.10 Descriptive Statistic of Post-test**

Descriptive Statistics						
	N	Minimum	Maximum	Sum	Mean	Std. Deviation
Posttest	35	40	72	1772	50.63	7.191
Valid N (listwise)	35					

Based on the table 4.10 above, it showed that the minimum score of post-test was 40, the maximum score was 72, and the mean was 50.63.

**Table 4.11 The Frequency of Students' Post-test in Control Class**

		Posttest			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	40	1	2.9	2.9	2.9
	44	9	25.7	25.7	28.6
	48	9	25.7	25.7	54.3
	52	9	25.7	25.7	80.0
	56	2	5.7	5.7	85.7
	60	2	5.7	5.7	91.4
	64	1	2.9	2.9	94.3
	68	1	2.9	2.9	97.1
	72	1	2.9	2.9	100.0
	Total	35	100.0	100.0	

From the table 4.11, The frequency of posttest score of control class after being distributed there are 1 student getting score between 0 – 40, which means that the students' speaking ability was poor, 31 students getting score between 41 – 60 which means that on the students' speaking ability is enough/fair, 3 students getting score between 61 – 80 which means that on the students' speaking ability is good.

There were 1 students who got score 40 (2.9%), 9 students got score 44 (25.7%), 9 students got score 48 (25.7%), 9 students got score 52 (25.7%), 2 students got score 56 (5.7%), 2 students got score 60 (5.7%), 1 student got score 64 (2.9%), 1 student got score 68 (2.9%), 1 student got score 72 (2.9%). The highest frequency was in score 44 (9 students), score 48 (9 students) and score 52 (9 students).

## **B. Hypothesis Testing**

Stating the null and alternative hypotheses

1. Null Hypothesis (Ho): There is no significant difference between the students' speaking scores before and after being taught by using Plus, Minus, Interesting strategy.
2. Alternative Hypothesis (Ha): There is significant difference between the students' speaking scores before and after being taught by using Plus, Minus, Interesting strategy.

To know whether there is any significant difference on students' speaking ability between students who were taught and who were not taught by using Plus, Minus, Interesting strategy, the researcher computed Independent Sample Test by using SPSS 16.0 Version. The outputs are as follows:

**Table 4.12 The Output of Group Statistic**  
**Group Statistics**

Group	N	Mean	Std. Deviation	Std. Error Mean
Student's treatment score	35	63.7143	9.38262	1.58595
control	35	50.6286	7.19103	1.21551

**Table 4.13 The Output of Independent Sample Test**  
**Independent Samples Test**

		The Result of Speaking Ability	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	3.834	
	Sig.	.054	
t-test for Equality of Means	t	6.549	6.549
	df	68	63.697
	Sig. (2-tailed)	.000	.000
	Mean Difference	13.08571	13.08571
	Std. Error Difference	1.99817	1.99817
	95% Confidence Interval of the Difference	Lower	9.09354
		Upper	17.07789
			17.07301

Before compute the t-test, the researcher did the homogeneity testing using F test (Levene's Test) to know whether to use *Equal Variance Assumed* or use *Equal Variance Not Assumed*. If the variance is the same, then the t-test use equal variance assumed. If the variance is different, then the t-test use equal variance not assumed. The hypotheses in F test are as follows:

1. Ho: both variance are the same (experimental and control class).
2. Ha: both variance are different (experimental and control class).

Ho is accepted if P value  $> 0,05$  and Ho is rejected if P value  $< 0,05$ .

Based on the table 4.13 above, it shows that P value (sig) is 0,054. It means that 0,054 is bigger than 0,05 and Ho is accepted. It can be concluded that both variance (experimental and control class) are the same and that the researcher used Equal Variance Assumed in making decision of T-test.

Based on the table 4.13 above, the value of  $t_{\text{count}}$  (equal variance assumed) is 6.549 and P value is 0.000. At the significance level of 0.05 in two-tailed, the score of  $t_{\text{table}}$  is 1.995. It means that  $t_{\text{count}}$  is bigger than  $t_{\text{table}}$  ( $6.549 > 1.995$ ) and P value is smaller than 0.05 ( $0.000 < 0.05$ ). Since the value of  $t_{\text{count}}$  is bigger than  $t_{\text{table}}$  and P value is smaller than 0.05, it means that the alternative hypothesis (Ha) is accepted and the null hypothesis (Ho) is rejected. In other words, it can be concluded that there is significant

difference on students' score in speaking ability between those who were taught by using plus, minus interesting strategy and those who were not.

For interpretation of decision based on the result of probability achievement that was:

- a. If the probability  $>0.050$ , so the null hypothesis ( $H_0$ ) accepted
- b. If the probability  $<0.050$ , so the null hypothesis ( $H_0$ ) rejected

Since 0.000 is smaller than significance level ( $\alpha$ ) 5%. The null hypothesis is rejected. In other word, the hypothesis saying that the mean after the treatment is smaller than or equal to the one before the treatment is rejected. It automatically accepts the alternative hypothesis saying that the mean after the treatment is bigger than the one before the treatment.

The conclusion is that Plus, Minus, Interesting strategy (PMI) is effective for improving the student's speaking ability.

### **C. Discussion**

From the result of the research finding above, it shows that there is significant difference on the students' score in speaking ability between those who were taught by using Plus, Minus, Interesting with those who were not. The mean of the students who were taught by using Plus, Minus, Interesting (experimental class) are 45.94 in pre-test and 63.71 in post-test. The mean of the students who were not taught by using Plus, Minus, Interesting (control class) are 45.37 in pre-test and 50.63 in post-test, and the result of the mean difference is 13.08571. It was found that the student's

speaking skill taught by Plus, Minus, Interesting strategy had better than the student's speaking skill without taught by Plus, Minus, Interesting strategy.

Based on the research conducted at SMAN 1 Ngunut Tulungagung, it can be inferred that teaching students by using Plus, Minus, Interesting strategy is better than students who are not. It means that Plus, Minus, Interesting strategy is effective to use in teaching speaking ability. As stated by Supartinah (2009) PMI is one of the ways that suitable in learning speaking, particularly for expressing and finding out intellectual attitudes (as cited in Nation and Thomas, 1988 : 51).

Based on the result of post-test that showed higher scores than pre-test score. It indicates that the students were improvement in their speaking skill after being taught Plus, Minus, Interesting strategy. The result of research in the class showed that the strategy can make students motivated when they learn to speak. In this case, the researcher as English teacher explaining the role of Plus, Minus, Interesting and ask students to apply this strategy in teaching-learning speaking. This is line with the finding of previous research done by First, Mantra (2016) stated that the application of Plus, Minus strategy could improve the students' achievement in speaking skill, it showed the students' personal improvement. Based on this research after taught by Plus, Minus strategy they could share their opinions with their group and they were more motivated in speaking skill.

Plus, Minus, Interesting strategy can use to practice speaking and they can more focus to prepare about the elements of language that they need based on plus, minus, and interesting point when they do Plus, Minus, Interesting strategy it is line with theory of Fogarty and Kern (2009:38) describes that PMI (Plus, Minus, Interesting) as a strategy that requires to look at three perspectives: the positive or pluses, the negative or minuses, and the neutral or the interesting and also to make the students more active speaking in the classroom with use three perspectives. It means the process of teaching and learning through Plus, Minus, Interesting strategy give the opportunity to the students to practice speaking with different point of view to share their opinion. Therefore, Plus, Minus, Interesting strategy was effective to improve students' speaking ability. The implementation of Plus, Minus, Interesting strategy in teaching and learning speaking process give a positive effect on students' achievement.

Based on the result of this study above indicates that the Plus, Minus, Interesting (PMI) strategy treatment increase students' speaking ability. Besides, the researcher gave treatment to the students in three meetings. It means the treatment become one of factors increasing the student's speaking ability. By giving the treatment, the students understood well the material, so their score increased. Students of tenth grade at SMAN 1 Ngunut have a good response while applying PMI strategy and that the students more enthusiastic in learning speaking ability.