

CHAPTER IV

RESEARCH FINDINGS AND DISCUSSION

A. Data Description

This part will explain about the students' scores between experiment and control class. There were some sections, they were pre-test, post-test and data analysis. The data collection was from the results of students' scores of pre-test and post-test in both experimental class and control class. Experimental and control class were given for pre-test at the first time. The result of pre-test showed the ability of both groups in speaking. The post-test was conducted after treatment was given to the experimental class using Inside Outside Circle (IOC) and control class was given by conventional method. Pre-test experiment and control was conducted on 7th march 2020. The treatment was given both classes in three meetings. The researcher conducted First meeting was on 11th march, Second meeting was on 13th march and Third meeting was on 14th march 2020. After the treatment given, the researcher gave post-test to know students' achievement in speaking skill and it was conducted for both classes on 8th April 2020 by sing Daring Test.

1. The result of validation test

Before the test given to the students, the researcher tested the test validation to the expert. There were two experts that were given the test. They were the English teacher of MTs N 2 Jepara. Based on the result of test validation, it showed that the test that was made by researcher was

valid. So the test could be used to pre-test and post-test. The result of test validation was as follow.

Table 8 The result of test validation

No	Aspect	Expert 1		Expert 2	
		Yes	No	Yes	No
1	Is the instrument in line with the basic eight grade competencies and indicators in the second semester?	✓		✓	
2	Is the material quality and subject matter relevant to the school or grade level?	✓		✓	
3	Are the directions not difficult to understand for the students?	✓		✓	
4	Are the directions to be measured according to aspect?	✓		✓	
5	Do the directions suit the specification?	✓		✓	

2. Pre-test Score

Table 9 The students' pre-test score of experimental class

No	Name	Criteria					Total Score	Mean Score
		P	V	F	G	C		
1	Student 1	3	4	3	3	4	17	68
2	Student 2	3	4	2	4	4	17	68
3	Student 3	3	4	3	3	4	17	68
4	Student 4	3	3	3	4	4	17	68
5	Student 5	4	4	4	4	4	20	80
6	Student 6	4	4	3	3	4	18	72
7	Student 7	4	4	4	4	5	21	84
8	Student 8	4	4	3	4	4	19	76
9	Student 9	3	4	3	3	3	16	64
10	Student 10	4	4	3	3	4	18	72
11	Student 11	3	3	2	4	5	17	68
12	Student 12	3	4	2	4	5	18	72
13	Student 13	3	4	3	4	5	19	76
14	Student 14	3	4	3	3	3	16	64

15	Student 15	3	4	3	4	5	19	76
16	Student 16	3	3	3	3	3	15	60
17	Student 17	4	4	3	4	4	19	76
18	Student 18	4	3	4	4	3	18	72
19	Student 19	3	4	3	3	3	16	64
20	Student 20	3	4	2	4	5	18	72
21	Student 21	4	5	3	3	4	19	76
22	Student 22	4	4	3	3	3	17	68
23	Student 23	3	4	4	4	4	19	76
24	Student 24	3	3	3	3	3	15	60
25	Student 25	4	3	3	3	3	16	64
26	Student 26	4	4	4	4	5	21	84
27	Student 27	3	4	3	4	3	17	68
28	Student 28	3	3	4	4	5	19	76
29	Student 29	3	4	2	4	5	18	72
30	Student 30	3	3	3	4	5	18	72
31	Student 31	3	4	2	4	3	16	64
32	Student 32	4	4	3	3	4	18	72

33	Student 33	4	4	4	4	5	21	84
34	Student 34	4	4	3	4	4	19	76
35	Student 35	3	4	3	3	3	16	64
36	Student 36	4	4	3	3	4	18	72
37	Student 37	3	3	2	4	5	17	68
38	Student 38	3	4	2	4	5	18	72
								2272
								71

Table 10 The students' pre-test score of control class

No	Name	Criteria					Total Score	Mean Score
		P	V	F	G	C		
1	Student 1	3	3	3	4	4	17	68
2	Student 2	3	4	4	4	5	20	80
3	Student 3	3	4	3	3	3	16	64
4	Student 4	4	4	3	3	5	19	76
5	Student 5	3	4	3	3	5	18	72
6	Student 6	3	3	3	3	4	16	64

7	Student 7	4	4	4	4	5	21	84
8	Student 8	4	4	3	4	4	19	76
9	Student 9	3	4	3	3	3	16	64
10	Student 10	4	4	4	3	4	19	76
11	Student 11	3	3	3	3	5	17	68
12	Student 12	3	3	3	3	5	17	68
13	Student 13	4	4	4	4	4	20	80
14	Student 14	3	5	4	4	4	20	80
15	Student 15	3	4	3	4	4	18	72
16	Student 16	4	3	3	5	4	19	76
17	Student 17	4	4	3	3	4	18	72
18	Student 18	3	3	5	4	5	20	80
19	Student 19	3	4	3	4	4	18	72
20	Student 20	3	4	4	4	5	20	80
21	Student 21	4	4	3	4	4	19	76
22	Student 22	3	3	3	3	5	17	68
23	Student 23	3	4	4	4	5	20	80
24	Student 24	3	4	3	3	4	17	68

25	Student 25	4	4	5	4	4	21	84
26	Student 26	4	4	4	4	3	19	76
27	Student 27	3	4	3	4	5	19	76
28	Student 28	3	3	3	3	4	16	64
29	Student 29	3	3	3	4	5	18	72
30	Student 30	3	4	4	3	5	19	74
31	Student 31	3	3	3	3	4	16	64
32	Student 32	3	4	4	4	5	20	80
33	Student 33	4	4	3	3	4	18	72
34	Student 34	3	3	5	4	5	20	80
35	Student 35	3	4	3	4	4	18	72
36	Student 36	3	4	4	3	4	18	72
37	Student 37	4	4	3	4	4	19	76
38	Student 38	3	3	3	4	5	18	72
								2354
								73,5625

Based on the table 7 it could be seen the mean of pre-test in experimental class was 71, standard deviation was 6,159, N was 38, the

minimum score was 60 and maximum was 84 (See Appendix). While in table 8 it could be seen the mean of pre-test in control class was 73,5625, standard deviation was 5,768, N was 38 the minimum score was 64 and maximum was 84 (See Appendix). At the beginning of the research, the pre-test was administered to know students' achievement in speaking skill before they were given treatments by the researcher. The result showed that the differences of pre-test score between experimental class and control class was 2,5625.

3. Post-test Score

Table 11 The students' post-test score of experimental class

No	Name	Criteria					Total Score	Mean Score
		P	V	F	G	C		
1	Student 1	3	4	3	4	4	18	72
2	Student 2	4	4	4	5	5	22	88
3	Student 3	3	4	3	3	4	17	68
4	Student 4	4	4	4	4	4	20	80
5	Student 5	4	4	3	3	5	19	76
6	Student 6	4	4	3	4	4	19	76
7	Student 7	4	4	4	4	5	21	84
8	Student 8	4	5	3	4	4	20	80
9	Student 9	3	4	3	3	4	17	68
10	Student 10	4	5	4	4	5	22	84
11	Student 11	4	3	4	3	4	18	72

12	Student 12	4	3	3	4	4	18	72
13	Student 13	3	4	4	5	5	21	84
14	Student 14	4	4	5	5	4	22	88
15	Student 15	4	3	3	4	4	18	72
16	Student 16	4	4	4	4	5	21	84
17	Student 17	3	4	3	5	4	19	76
18	Student 18	4	4	5	4	4	21	84
19	Student 19	4	4	3	4	4	19	76
20	Student 20	4	4	3	3	5	19	76
21	Student 21	4	5	5	4	4	22	88
22	Student 22	3	3	4	3	4	17	68
23	Student 23	4	4	4	5	5	22	88
24	Student 24	3	4	3	4	4	18	72
25	Student 25	4	5	4	4	5	22	88
26	Student 26	4	4	3	4	5	20	80
27	Student 27	4	4	4	4	4	20	80
28	Student 28	3	5	4	3	5	20	80
29	Student 29	2	5	3	4	5	19	76
30	Student 30	3	4	3	5	5	20	80
31	Student 31	3	4	3	3	4	17	68
32	Student 32	3	4	4	4	4	19	76
33	Student 33	4	5	5	4	4	22	88
34	Student 34	3	3	4	3	4	17	68

35	Student 35	4	3	4	4	4	19	76
36	Student 36	3	4	3	4	4	18	72
37	Student 37	4	5	4	4	5	22	88
38	Student 38	4	4	3	4	5	20	80
								2504
								78,25

Table 12 The students' post-test score of control class

No	Name	Criteria					Total Score	Mean Score
		P	V	F	G	C		
1	Student 1	3	4	3	3	4	17	68
2	Student 2	3	4	3	4	4	18	72
3	Student 3	3	4	3	4	4	18	72
4	Student 4	4	4	3	4	4	19	76
5	Student 5	4	4	4	4	4	20	80
6	Student 6	4	4	3	3	4	18	72
7	Student 7	4	4	4	4	4	20	80
8	Student 8	4	4	3	4	4	19	76
9	Student 9	3	4	3	3	3	16	64
10	Student 10	4	4	3	4	4	19	76
11	Student 11	3	3	3	4	4	17	68
12	Student 12	3	4	3	4	5	19	76
13	Student 13	3	4	3	4	5	19	76

14	Student 14	3	4	3	4	4	18	72
15	Student 15	3	4	4	4	4	19	76
16	Student 16	4	3	4	3	3	17	68
17	Student 17	4	4	3	4	5	20	80
18	Student 18	4	4	4	4	4	20	80
19	Student 19	3	4	3	3	4	17	68
20	Student 20	3	4	3	4	5	19	76
21	Student 21	4	5	4	4	4	21	84
22	Student 22	4	4	3	3	3	17	68
23	Student 23	4	4	4	4	5	21	84
24	Student 24	3	3	3	3	4	16	64
25	Student 25	4	3	3	4	3	17	68
26	Student 26	4	4	4	4	5	21	84
27	Student 27	4	4	4	4	4	20	80
28	Student 28	3	4	4	4	5	20	80
29	Student 29	3	4	2	4	5	18	72
30	Student 30	3	3	3	4	5	18	72
31	Student 31	3	4	2	4	3	16	64
32	Student 32	4	4	3	3	4	18	72
33	Student 33	3	4	3	4	4	18	72
34	Student 34	4	4	3	4	4	19	76
35	Student 35	4	4	4	4	4	20	80
36	Student 36	3	3	3	3	4	16	64

37	Student 37	4	3	3	4	3	17	68
38	Student 38	4	4	4	4	5	21	84
								2368
								74

Based on the table 9 it could be seen the mean of post-test in experimental class was 78,25, standard deviation was 6,682, N was 38, the minimum score was 68 and maximum was 84 (See Appendix). While in table 10 it could be seen the mean of post-test in control class was 74, standard deviation 6,081, N was 38 the minimum score was 64 and maximum was 84 (See Appendix). At the end of the research, post-test was given to measure the improvement of the students speaking skill in both classes after the treatments done. The result showed that the differences of post-test score between experimental class and control class was 4,25. Its mean teaching speaking by inside outside circle more effective and by using inside outside circle can increase their speaking score.

B. Data Analysis

After collecting the data, the researcher analyzed the data by using independent t- test. There were two assumptions that must be done before the researcher analyzed the data by using independent sample t-test.

1. Pre-test

a. The Result of Normality

Table 13 Normality Tests of Pre-test

class		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
students' score	pre-test experiment	,137	38	,071	,944	38	,055
	pre-test control	,133	38	,088	,933	38	,026

The normality test is used to measure whether the data in the experimental class and control class are normally distributed or not. In this research the researcher used statistical computations by using SPSS (*Statistical Package for Social Science*) for normality. Based on Table above, it could be seen in table kolmogorov-smirnov that $P_{\text{value}}(\text{Sig.})$ of pre-test experiment was 0,88 and control class 0,071, because $\text{Sig. } (P_{\text{value}})$ of them $> \alpha$ 0.05 it means H_0 is accepted and Sig. The conclusion was that the data in the experimental class and control class had normal distribution.

b. The Result of Homogeneity

Table 14 Homogeneity Test of Pre-test

		Levene Statistic	df1	df2	Sig.
students' score	Based on Mean	,007	1	74	,936
	Based on Median	,004	1	74	,949
	Based on Median and with adjusted df	,004	1	70,921	,949
	Based on trimmed mean	,010	1	74	,922

Homogeneity test is used to determine whether the data obtained from the sample homogenous or not. The researcher used statistical computation by using SPSS (*Statistical Package for Social Science*) for homogeneity. The test of homogeneity was employed by Levine's test. Based on the results obtained in the test of homogeneity of variances in the column, it could be seen that $Sig. (P_{value}) = .936 > \alpha = 0.05$. It demonstrated that H_0 was accepted because $Sig. (P_{value}) > \alpha = 0.05$. It means that the variance of the data was homogenous.

c. The Result of Independent Sample T-test

Table 15 Independent Sample T-test of Pre-test

		Levene's Test for Equality of		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2- tailed)	Mean Differenc e	Std. Error Differenc e	95% Confidence Interval of the Difference	
									Lower	Upper
students's core	Equal variances assumed	,007	,936	-1,730	74	,088	-2,368	1,369	-5,096	,359
	Equal variances not assumed			-1,730	73,684	,088	-2,368	1,369	-5,096	,359

Based on the previous explanation that the normality and homogeneity test were satisfied, therefore, the researcher tested the hypothetical test using parametrical statistic, independent sample t-test. Based on the result obtained in the independent sample t-test in the table 13 that the value of significant generated Sig. ($P_{\text{value}} = -1,730 > \alpha = 0.05$). So, H_0 was accepted and H_a was rejected. Based on the computation, it could be concluded that there was no a significant influence of using Inside Outside Circle towards student' Speaking Skill at the second semester of the Eighth grade of MTs N 2 Jepara in the academic year of 2019/2020.

2. Post-test

a. The Result of Normality

Table 16 Tabel Normality Test of Post-test

Class		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
students ' score	post- test experi ment	,136	38	,076	,916	38	,008
	post- test control	,129	38	,113	,934	38	,026

Based on Table above, it could be seen that $P_{\text{value}}(\text{Sig.})$ of pre-test experiment was ,076, ,113, Because $\text{Sig. } (P_{\text{value}})$ of them $> \alpha 0.05$ it means H_0 is accepted and $\text{Sig. } (P_{\text{value}})$ for the control class $> \alpha 0.05$ it means H_a is accepted. The conclusion was that the data in the experimental class and control class had normal distribution.

b. The Result of Homogeneity

Table 17 Homogeneity Test of Post-test

		Levene Statistic	df1	df2	Sig.
students' score	Based on Mean	,498	1	74	,482
	Based on Median	,496	1	74	,483
	Based on Median and with adjusted df	,496	1	73,397	,484
	Based on trimmed mean	,498	1	74	,482

Homogeneity test is used to determine whether the data obtained from the sample homogenous or not. The researcher used statistical computation by using SPSS (*Statistical Package for Social Science*) for homogeneity. The test of homogeneity was employed by Levine's test. Based on the results obtained in the test of homogeneity of variances in the column, it could be seen that $Sig. (P_{value}) = > 482 \alpha = 0.05$. It demonstrated that H_0 was accepted because $Sig. (P_{value}) > \alpha = 0.05$. It means that the variance of the data was homogenous.

c. The Result of Independent Sample T test

Table 18 Independent Sample T-test of Post-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
students' score	Equal variances assumed	0,498	0,482	2,945	74	0,004	4,316	1,466	1,395	7,236
	Equal variances not assumed			2,945	73,35	0,004	4,316	1,466	1,395	7,237

Based on the previous explanation that the normality and homogeneity test were satisfied, therefore, the researcher tested the hypothetical test using parametrical statistic, independent sample t-test. Based on the result obtained in the independent sample t-test in the table 13 that the value of significant generated Sig. ($P_{\text{value}} = 2,945 > \alpha = 0.05$). So, H_0 was rejected and H_a was accepted. Based on the computation, it could be concluded that there was no a significant influence of using Inside Outside Circle towards student' Speaking Skill at the second semester of the Eighth grade of MTs N 2 Jepara in the academic year of 2019/2020.

C. Discussion

At the beginning of the research, the pre-test was administered to know students' achievement in speaking skill before they were given

treatments by the researcher. Then, the students were taught by using Inside Outside Circle in the experimental class and conventional method in control class. In the end, the students were given post-test and it was to know the students' achievement after giving treatment. The result of pre-test and post-test in both of classes was as follow:

Table 19 Students' Mean score of Pre-test and Post-test in Experimental and Control class

No	Class	Mean Score	
		Pre-test	Post-test
1	Experiment class	71,26	78,32
2	Control Class	73,63	74

Based on table above, it could be seen that the mean pre-test score of experiment class was 71,26 and control class was 73,63. While the mean score of post-test score in experiment class was 78,32 and control class was 74. From the result, it could be seen that the result of the students' post-test was higher than pre-test. Besides that Inside Outside Circle can improve each aspect of students speaking skill including pronunciation, grammar, vocabulary, fluency, comprehension. The result of pre-test and post-test also showed that students who taught by using Inside Outside Circle got better result than students who taught by using conventional method.

Table 20 The Result Of Independent Sample T-Test In Pre-Test And Post-Test

	T _{value}	T _{table}	T-test result

Pre-test	-1,730	2,000	H_0 was accepted $(-t_{table} < t_{value} < t_{table})$ $(-2,000 < -1,730 < 2,000)$
Post-test	2,945	2,000	H_a was accepted $(t_{value} > t_{table})$ $(2,945 > 2,000)$

Based on the analysis of the data, it could be seen that t_{value} in pre-test was -1,730. It indicated that $t_{value} < t_{table}$, so the null hypothesis was accepted and the alternative hypothesis was rejected. Then t_{value} in post-test was 2,945. It indicated that $t_{value} > t_{table}$, so the null hypothesis was rejected and the alternative hypothesis was accepted. The result of data analysis showed that there was significant differences in students' score in pre-test and post-test. The post-test score higher than pre-test especially in experiment class was higher than control class after giving treatment. It meant that treatment had influence of using Inside Outside Circle towards students speaking skill at the Eighth grade of MTs N 2 Jepara, it happened because in Inside Outside Circle (IOC) method the students share their idea each other with the partner directly.

There are some previous related findings that are similar with this result finding. First was from Kamaliah (2018) in research entitled "Applying the Inside-Outside Circle (IOC) Towards Students' Speaking Ability at The Second Grade of SMA Inshafuddin". The results of this study indicate that Inside-Outside Circle (IOC) could effectively

improve the ability of talking students. The t-test result is also endorsed as the measurement value gets t-score ($4.381 > t\text{-table } (2.120)$). The outcome of the questionnaire indicates that the students become more involved in teaching and learning process by using the Inside-Outside Circle (IOC).

Second was from Wijaya & Sari (2017) in the research entitled "Inside Outside Circle: Teaching Students' Speaking Skill". The result showed that sig's test has been figured out. $(P) = 0.012 < \alpha = 0.05$. This means that H_0 has been rejected and H_a has been approved. Therefore, the use of Inside Outside Circle in the second semester of the eighth grade of SMP N 2 Sumberejo Tanggamus in the academic year 2016/2017 had a significant influence on the speaking ability of students.

Third was from Sudrajad & Wijaya (2016) in the research entitled "The Effectiveness of Inside-Outside Circle Method by Using Cue Card for Students' Speaking ability at Seventh Graders". Research results would be counted using $\alpha = 0.05$ T-test statistics. The study's finding was that T_{count} was 6.059 and T_{table} was 2.007. From the findings, it could be summed up that the use of the Inside-Outside Circle by using a cue card was effective at seventh graders for students' speaking ability.

The next previous was from Wahyudi, Mukhaiyar, & Kusni (2014) study entitled "Improving Student Speaking Skills Using Inside-Outside Circle Technology (At Teen Level 5, Lbpp Lia, Pekanbaru)" Based on the referring to the study and findings, the researcher concluded that Inside-

Outside Circle Technique would boost the speaking skills of ET-5/1 students at LBPP LIA Pekanbaru in Cycle1.

The last previous was from Hannum, Ikhsan, & Antika (2017) in research entitled “The Effectiveness of Inside-Outside Circle Strategy toward Students’ Speaking Ability”. The results showed that the Inside-Outside Circle strategy could improve the speaking ability of eighth grade students of MTs Darul Ulum Yapa Kombang Baru Tapus in East Pasaman. This was evidenced by $t\text{-count} = 2.39$ greater than $t\text{-table} = 1.68$ at the 0.05 level. Thus it could be concluded that the use of the Inside-Outside Circle strategy could improve the English speaking ability of students of class VIII MTs Darul Ulum Yapa Kombang Baru Tapus in East Pasaman.

