## CHAPTER IV

## RESEARCH FINDINGS AND DISCUSSION

## A. Research Findings

The researcher started to analyze the data after getting the students oral test. The researcher gave score based on four speaking elements (grammar, vocabulary,fluency, and pronounciation) to the students' performance is speaking test. The data obtained from the result of students' oral test are presented in table 4.1. The class consisted of 35 students of MTs Al Ma'arif Tulungagung.

Table 4.1 shows the students' score before using group interaction.

| No | Subject | Grammar | Vocabulary | Fluency | Pronunciation | Total Score |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | ARP | 65 | 55 | 45 | 65 | 58 |
| 2 | APS | 55 | 75 | 55 | 60 | 61 |
| 3 | AHM | 75 | 75 | 55 | 65 | 68 |
| 4 | AH | 55 | 80 | 65 | 75 | 69 |
| 5 | ASN | 85 | 50 | 65 | 65 | 66 |
| 7 | APO | 80 | 65 | 75 | 70 | 73 |
| 7 | AVM | 75 | 65 | 55 | 755 | 68 |
| 8 | DNR | 65 | 75 | 75 | 75 | 75 |
| 9 | DW | 55 | 75 | 75 | 65 |  |


| 10 | EFM | 55 | 85 | 55 | 75 | 68 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11 | FLA | 75 | 85 | 65 | 70 | 74 |
| 12 | FRN | 75 | 55 | 55 | 55 | 60 |
| 13 | FH | 80 | 75 | 65 | 75 | 74 |
| 14 | GNI | 55 | 55 | 65 | 75 | 63 |
| 15 | GMF | 55 | 65 | 70 | 65 | 64 |
| 16 | GS | 65 | 75 | 60 | 65 | 66 |
| 17 | HJA | 65 | 65 | 55 | 75 | 65 |
| 18 | 11 | 75 | 75 | 55 | 65 | 68 |
| 19 | IM | 75 | 75 | 55 | 55 | 65 |
| 20 | MAFR | 85 | 55 | 55 | 60 | 64 |
| 21 | MZH | 55 | 80 | 60 | 75 | 68 |
| 22 | MSP | 55 | 75 | 45 | 75 | 63 |
| 23 | MRZ | 60 | 65 | 50 | 55 | 58 |
| 24 | MIA | 75 | 55 | 65 | 70 | 66 |
| 25 | MSF | 65 | 55 | 55 | 75 | 63 |
| 26 | NAP | 55 | 65 | 75 | 75 | 68 |
| 27 | NAAA | 45 | 85 | 65 | 65 | 65 |


| 28 | NF | 75 | 85 | 65 | 65 | 73 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 29 | NLV | 65 | 75 | 45 | 70 | 64 |
| 30 | PSN | 65 | 65 | 65 | 75 | 68 |
| 31 | RFP | 75 | 55 | 55 | 75 | 65 |
| 32 | RDI | 75 | 75 | 65 | 65 | 70 |
| 33 | WRU | 85 | 55 | 65 | 70 | 69 |
| 34 | WS | 85 | 85 | 60 | 65 | 74 |
| 35 |  |  |  |  |  |  |

The pretest was given to the students by asking them to make a group interaction and practice a role play. It was done before treatment process. This test was intended to know the basic competence of students before they got treatment.

Table 4.3 Frequency of Pretest

Pretest

|  |  | Frequency | Percent | Valid Percent | Cumulative <br> Percent |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Valid | 58 | 2 | 5.7 | 5.7 | 5.7 |
|  | 60 | 1 | 2.9 | 2.9 | 8.6 |
|  | 61 | 1 | 2.9 | 2.9 | 11.4 |
|  | 63 | 3 | 8.6 | 8.6 | 20.0 |
|  | 64 | 3 | 8.6 | 8.6 | 28.6 |
|  | 65 | 5 | 14.3 | 14.3 | 42.9 |
|  | 66 | 3 | 8.6 | 8.6 | 51.4 |
|  | 68 | 8 | 22.9 | 22.9 | 74.3 |
|  | 69 | 2 | 5.7 | 5.7 | 80.0 |
|  | 70 | 1 | 2.9 | 2.9 | 82.9 |
|  | 73 | 3 | 8.6 | 8.6 | 91.4 |
|  | 74 | 3 | 8.6 | 8.6 | 100.0 |
|  | Total | 35 | 100.0 | 100.0 |  |

Based on table of pretest above that consist of 35 students. It show that the mean score is 66.68 , the median score is 66.00 , the mode score is 68 , and the total score is 2334 . The frequency of pretest after distributed there are $42.9 \%$ got the score under the mean. While $74.3 \%$ students got score above the mean.

Table 4.4 shows the students' score after being organized in group interaction.

| No | Subject | Grammar | Vocabulary | Fluency | Pronunciation | Total Score |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | ARP | 70 | 60 | 55 | 70 | 64 |
| 2 | APS | 65 | 85 | 60 | 65 | 69 |
| 3 | AHM | 80 | 80 | 60 | 75 | 74 |
| 4 | AH | 60 | 85 | 75 | 80 | 75 |
| 5 | ASN | 90 | 55 | 60 | 75 | 70 |
| 6 | APO | 85 | 70 | 80 | 75 | 78 |
| 7 | AVM | 85 | 70 | 60 | 80 | 74 |
| 8 | DNR | 70 | 80 | 80 | 80 | 78 |
| 9 | DW | 60 | 80 | 85 | 75 | 75 |
| 10 | EFM | 60 | 90 | 60 | 80 | 73 |
| 11 | FLA | 85 | 90 | 70 | 75 | 80 |
| 12 | FRN | 80 | 60 | 65 | 60 | 66 |
| 13 | FH | 85 | 80 | 70 | 80 | 79 |
| 14 | GNI | 60 | 60 | 70 | 80 | 68 |
| 15 | GMF | 65 | 70 | 80 | 70 | 71 |


| 16 | GS | 70 | 80 | 65 | 70 | 71 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 17 | HJA | 75 | 75 | 60 | 80 | 73 |
| 18 | II | 80 | 80 | 60 | 70 | 73 |
| 19 | IM | 80 | 80 | 65 | 60 | 71 |
| 20 | MAFR | 90 | 60 | 60 | 65 | 69 |
| 21 | MZH | 60 | 85 | 65 | 80 | 73 |
| 22 | MSP | 60 | 80 | 50 | 85 | 69 |
| 23 | MRZ | 65 | 75 | 60 | 65 | 66 |
| 24 | MIA | 80 | 65 | 70 | 75 | 73 |
| 25 | MSF | 75 | 60 | 60 | 80 | 69 |
| 26 | NAP | 60 | 70 | 85 | 80 | 74 |
| 27 | NAAA | 55 | 90 | 75 | 75 | 74 |
| 28 | NF | 80 | 90 | 70 | 75 | 79 |
| 29 | NLV | 70 | 85 | 55 | 75 | 71 |
| 30 | PSN | 75 | 70 | 75 | 80 | 75 |
| 31 | RFP | 80 | 60 | 60 | 80 | 70 |
| 32 | RDI | 80 | 80 | 70 | 70 | 75 |
| 33 | WRU | 90 | 60 | 75 | 75 | 75 |


| 34 | WS | 90 | 90 | 65 | 70 | 79 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 35 | YA | 75 | 70 | 65 | 85 | 74 |

The post test was given to the students by asking them to make a group interaction and practice a role play. It was done after treatment process. The test was intended to know the students speaking skill after students got treatment.

## Table 4.5 Descriptive Statistics of Posttest

## Statistics

Postest

| N | Valid | 35 |
| :--- | :--- | ---: |
|  | Missing | 0 |
| Mean |  | 72.7714 |
| Median |  | 73.0000 |
| Mode |  | $73.00^{2}$ |
| Sum |  | 2547.00 |

a. Multiple modes exist. The
smallest value is shown

Table 4.6 Frequency of Posttest

| Posttest |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Frequency | Percent | Valid Percent | Cumulative <br> Percent |
| Valid | 64 | 1 | 2.9 | 2.9 | 2.9 |
|  | 66 | 2 | 5.7 | 5.7 | 8.6 |
|  | 68 | 1 | 2.9 | 2.9 | 11.4 |
|  | 69 | 4 | 11.4 | 11.4 | 22.9 |
|  | 70 | 2 | 5.7 | 5.7 | 28.6 |
|  | 71 | 4 | 11.4 | 11.4 | 40.0 |
|  | 73 | 5 | 14.3 | 14.3 | 54.3 |
|  | 74 | 5 | 14.3 | 14.3 | 68.6 |
|  | 75 | 5 | 14.3 | 14.3 | 82.9 |
|  | 78 | 2 | 5.7 | 5.7 | 88.6 |
|  | 79 | 3 | 8.6 | 8.6 | 97.1 |
|  | 80 | 1 | 2.9 | 2.9 | 100.0 |
|  | Total | 35 | 100.0 | 100.0 |  |

Based on table of pretest above that consist of 35 students. It show that the mean score is 72.77 , the median score is 73.00 , the mode score is 73 , and the total score is 2547 . The frequency of pretest after distributed there are $40.0 \%$ got the score under the mean. While $54.3 \%$ students got score above the mean.

## B. Data Analysis

Therefore, to investigate whether Group Interaction is effective on the students' speaking skill, the researcher tested the result of pre-test and post-test by using Paired Sample Test in IBM SPSS Statistics 16. As what previously mentioned that there are two hypotheses in this study; (1) Null hypothesis stating that there is no any significant difference on students' speaking achievement before and after using Group Interaction, and (2) Alternative hypothesis stating that there is any significant difference on students' achievement in speaking before and after using Group Interaaction, the testing was done to investigate whether the null hypothesis could be rejected or not.

The result of data analysis is from student's score of pre-test and post-test as in the following table:

Table 4.7: Correlation

Correlations

|  |  | Pretest | Postest |
| :---: | :---: | :---: | :---: |
| Pretest | Pearson Correlation | 1 | . 959 " |
|  | Sig. (2-tailed) |  | . 000 |
|  | N | 35 | 35 |
| Postest | Pearson Correlation | . 959 | 1 |
|  | Sig. (2-tailed) | . 000 |  |
|  | N | 35 | 35 |

[^0]Relying on the table 4.7, the output of Paired Samples Correlations shows that there is a correlation between both samples. The numeral both correlation is 0.959 and the numeral of significance is 0.00 . The interpretation of decision based on the result of probability achievement is:
a) If the probability $>0.05$ then the null hypothesis is accepted
b) If the probability $<0.05$ then the null hypothesis is rejected

The standard level of significance is 0.05 . if the result of computation shows that the significance 2 tail on the table is lower than 0.05 , there is a significant difference on students' speaking score before and after being taught by using group interaction. On the other hand, if the significance 2 tails in the table is higher than the significance level (0.05), there is no significant difference on the students' speaking score before and after being taught by using group interaction.

In table 4.7, the numeral significance level 0.02 is lower than 0.05 and therefore, the null hypothesis is rejected. It means that there is a significant difference on students' speaking score before and after being taught by using group interaction. In other words, group interaction is effective to improve the students’ speaking score.

Table 4.8: Paired Sample Statistics

Paired Samples Statistics

|  |  | Mean | N | Std. Deviation | Std. Error Mean |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Pair 1 | Pretest | 66.6857 | 35 | 4.27559 | .72271 |
|  | Postest | 72.7714 | 35 | 3.95627 | .66873 |

The data presented above is the performance scores of the one group of students taken as the sample, before and after using group interaction as the treatment. The mean score of pre-test is 66.68 . While the mean score of post-test is 72.77. The number of students ( N ) both in pre-test and post-test is 35 . The standard deviation of pre-test is 4.275 and the error mean is 0.722 . On the posttest, the standard deviations 3.956 and the error mean is 0.668 .

Based on the result of mean, it can be concluded that the mean score of pre-test is different from the mean score of post-test. Thus it can be concluded that there is increase since the mean score of post-test is higher than pre-test.

Table 4.9: Paired Samples Correlation

Paired Samples Correlations

|  | N | Correlation | Sig. |
| :--- | :--- | ---: | ---: | ---: |
| Pair 1 $\quad$ Pretest \& Postest | 35 | .959 | .000 |

Based on the table 4.9 above, shows the correlations between two scores of pre-test and post-test where it seen that the correlation scores of pre-test and post-test $=0.959$ and $\operatorname{sig}=0.000$. For interpretation of decision based on the result of probability achievement, that is:
a) If the sig $>0.05$, means $\mathrm{H}_{0}$ is accepted
b) If the sig $<0.05$, means $\mathrm{H}_{0}$ is rejected

It shows that $\operatorname{sig}=0.000$ is lower than 0.05 means that $\mathrm{H}_{0}$ is rejected and Ha is accepted. So, it can be concludes that there is significant correlation between pre - test and post - test score.

## Table 4.10 Paired Sample T-test

Paired Samples Test

|  | Paired Differences |  |  |  |  | T | df | Sig. (2tailed) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean | Std. <br> Deviation | Std. Error <br> Mean | 95\% Confidence Interval of the Difference |  |  |  |  |
|  |  |  |  | Lower | Upper |  |  |  |
| Pair 1 Pretest <br> Postest | -6.08571 | 1.22165 | . 20650 | -6.50537 | -5.66606 | -29.471 | 34 | . 000 |

Based on the table 4.10, output paired samples test shows the result of compare analysis with using T test. Output shows mean pre-test and post-test (6.085), standard deviation (1.221), mean standard error (0.206). The lower
different (6.505), while upper different (5.666). The result test $t=(29.47)$ with $\mathrm{df}=34$ and significance (0.000).

We can see that the tcount is 29.471 . The way to test whether null hypothesis could be rejected was by comparing the result of tcount and table. If the result of toount is larger than table at the level of significance 0.05 , the null hypothesis can be rejected. On the contrary, if the resultof tcount is smaller than ttable, the null hypothesis cannot be rejected. In consulting to table, the researcher needed to find out the degree of freedom. As can be seen in Table 4.10 that (Degree of freedom) is 34, the researcher consulted to the table, and at the level of significance 0.05 , the value of table is 2.032 . Comparing to the value of table, the value of is larger tcount $>$ table $(29.47>2.032)$. Also, the way to test whether the null hypothesis can be rejected is by comparing p -value with the standard level of significance, 0.05 . The convention to reject the null hypothesis is when the p value of the obtained statistics is less than0.05 (Balnaves \& Calputi, 2001).

As Table 4.10 shows, the p-value is less than $0.05(0.000<0.05)$. Thus, there was enough evidence indicating that the null hypothesis could be rejected, and it could be concluded that using group interaction was effective on the students' achievement in speaking.

## C. The Result of Normality Testing

In this part the researcher discuss about the result of normality testing.

## 1. The Result of Normality Testing

Normality testing is conducted to determine whether the gotten data is normal distribution or not. The researcher used SPSS.16. One-

Sample Kolmogorov-Smirnove test by the value of significance $(\alpha)=$ 0.050 . The result can be seen below:

Table 4.11: Normality Testing

One-Sample Kolmogorov-Smirnov Test

|  |  | Pretest | Postest | Unstandardized <br> Residual |
| :---: | :---: | :---: | :---: | :---: |
| N |  | 35 | 35 | 35 |
| Normal Parameters ${ }^{\text {a }}$ | Mean | 66.6857 | 72.7714 | . 0000000 |
|  | Std. Deviation | 4.27559 | 3.95627 | 1.21318585 |
| Most Extreme Differences | Absolute | . 122 | . 123 | . 159 |
|  | Positive | . 122 | . 115 | . 121 |
|  | Negative | -. 106 | -. 123 | -. 159 |
| Kolmogorov-Smirnov Z |  | . 723 | . 728 | . 939 |
| Asymp. Sig. (2-tailed) |  | . 673 | . 664 | . 341 |
| a. Test distribution is Normal. |  |  |  |  |

The sig/p value on pre-test is 0.673 and it is lower 0.05 ( 0.673 > 0.05). It means that $H_{0}$ is accepted and $H_{a}$ is rejected and the data is in normal distribution. Then, for post-test score the value of sig/p is 0.664 and that is bigger than 0.05 ( $0.664>0.05$ ). It also means that $\mathrm{H}_{0}$ is accepted and $\mathrm{H}_{\mathrm{a}}$ is rejected and the data is in normal distribution. So, it can be interpreted that both of data (pre-test and post-test score) are in normal distribution.

## D. Hypothesis Testing

From the data analysis it could be identify that:

1. When the value of $\mathrm{T}_{\text {count }}>\mathrm{T}_{\text {table }}$ in $d f=34$ with the significant level 0.05 . The alternative hypothesis $\left(\mathrm{H}_{\mathrm{a}}\right)$ is accepted and the null hypothesis $\left(\mathrm{H}_{0}\right)$ is rejected. It means that there is significant different score of speaking achievement to eighth grade students at MTs Al Ma'arif Tulungagung before and after using group interaction.
2. When the value of $\mathrm{T}_{\text {count }}<\mathrm{T}_{\text {table }}$ in $d f=34$ with the significant level 0.05 . The null hypothesis $\left(\mathrm{H}_{0}\right)$ is accepted and the alternative hypothesis $\left(\mathrm{H}_{\mathrm{a}}\right)$ is rejected. It means that there is no significant different score of speaking achievement to eighth grade students at MTs Al Ma'arif Tulungagung before and after using group interaction.

The mean of total speaking achievement test score of 35 students before using group interaction (66.68). After getting treatment, the means score of students' achievement is (72.77). It means that the students' score is improved.

Based on the statistical calculation using t-test, the researcher gives interpretation to $\mathrm{t}_{\text {count }}$. First, she considered the d.f. with the d.f. $(35-1=34)$. He checked to the score of " $t$ " at the significant level of 0,05 . In fact, with the $d . f$. of (34) and the critical value 0,05 significant $\mathrm{t}_{\text {table }}$ was (2.032).

By comparing the " t " that she got in calculation $\mathrm{t}_{\mathrm{count}}=(29.47)$ and the value of " t " on the $\mathrm{t}_{\text {table }}=\mathrm{t}_{0.05}=(2.032)$, it is known that $\mathrm{t}_{\text {countis }}$ bigger than $\mathrm{t}_{\text {table }}=29.47>2.032$.

Because the $\mathrm{t}_{\text {count }}$ is bigger than $\mathrm{t}_{\text {table }}$, the null hypothesis (Ho) is rejected and the alternative hypothesis (Ha) is accepted. It means that there is significant different score of student's achievement in speaking of eighth grade students of MTs Al Ma'arif Tulungagung before and after using group interaction.

## E. Discussion

According to the result of t -test from the pre-Test and post-test, the value of tcount is 29.47 with $\mathrm{df}=27$ and the value of ttable is 2.032 at the level 0.05. If the sigma $(2$ tailed $)>0.05$, it means that the null hypothesis $(\mathrm{H} 0)$ is rejected and the alternative hypothesis (H1) is accepted. So that there is any significant difference between student's speaking ability before they are taught and after taught by using group interaction. The value of tcount was higher than the t -value of ttable (tcount 29.47> ttable 2.032). It showed that teaching speaking using group interaction have positive effect to improve students' speaking skill. Besides that, the result of the mean of post-test was higher than the mean of pre-test $(\mathrm{M} 2=72.77>\mathrm{M} 1=66.68)$. It means that there is significant improvement difference between student's speaking ability before they are taught and after taught by using group interaction. In other word, teaching speaking with group interaction was more effective than teaching speaking without using group interaction. In addition, group interaction
improved speaking skill in the second grade of student of MTs Al Ma'arif Tulungagung.

To help students in learning process, the teacher use group interaction, group interaction can motivate students to speaking because it is fun strategy for learning foreign language it is a line with theory Daniel Muijs and David Reynolds (2005:52) also demonstrates Working with other pupils may help them to develop their emphatic abilities by allowing them to see others' viewpoints which can help them to realize that everyone has strength and weaknesses. In this case the researcher as English teacher explained the role of group interactiton and asks students to apply in teaching-learning speaking. Now, the students do not look lazy when they have task from English teacher to speaking practice. Besides, they were also preferred English lessons, especially in speaking achievement, because they have a desire to fluently to speak English.


[^0]:    **. Correlation is significant at the 0.01 level (2-tailed).

