## CHAPTER IV

## FINDING AND DISCUSSION

This chapter presents three topics related to research finding that are the description of data, hypothesis testing and discussion.

## A. The Description Of Data

In this study, the researcher presented the data of students' score in pronunciation achievement between students who taught by using communicative drilling and students who taught without any strategy. Here, the researcher wanted to know the effectiveness of communicative drilling strategy on pronunciation achievement of eleventh graders at MAN 3 Tulungagung in academic year 2017/2018. The effectiveness can be seen from the significant different score of students' pronunciation achievement before and after being taught by using communicative drilling. Here, the researcher conducted pre-test, giving treatments by using communicative drilling and post-test. Before and after doing treatments, researcher done the pre-test and the post-test. Pre-test and post-test were done to obtain students' pronunciation achievement score.

The scores are divided into five criterions. They are excellent, very good, good, low, and failed. The students will categorize into excellent score if they got 85-100 score which means that they are able to do test very well. The students will categorize into good score if they got 71-84 score which means that they are have a little doubt. In this category they are able to do test well. The students will categorize into average score if they got $60-70$ score which means that they are able to do test pretty well. The student will categorize into poor score if they got

40-59 score which means that they just do the test. The last criteria are the students will categorize into very poor score if they got 0-39 score which means that they cannot do the test well. (See table 4.1)

Table 4.1 The Score's Criteria

| No | Interval Class | Criteria |
| :--- | :--- | :--- |
| 1. | $85-100$ | Excellent |
| 2. | $71-84$ | Very Good |
| 3. | $60-70$ | Good |
| 4. | $40-59$ | Low |
| 5. | $0-39$ | Failed |

(Adapted from article Riswanto and Haryanto E. 2012)

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' pronunciation achievement taught with using Communicative Drilling Technique

| No | Name | Class | Pre-test | Post-test |
| :---: | :---: | :---: | :---: | :---: |
| 1 | AFH | XI MIA 3 | 62 | 76 |
| 2 | AE | XI MIA 3 | 60 | 78 |
| 3 | AZJ | XI MIA 3 | 58 | 66 |
| 4 | A | XI MIA 3 | 58 | 70 |
| 5 | AR | XI MIA 3 | 70 | 70 |
| 6 | DN | XI MIA 3 | 52 | 74 |
| 7 | EBFY | XI MIA 3 | 66 | 78 |
| 8 | EYA | XI MIA 3 | 68 | 78 |
| 9 | FFA | XI MIA 3 | 70 | 72 |
| 10 | FNH | XI MIA 3 | 58 | 64 |
| 11 | FS | XI MIA 3 | 72 | 80 |
| 12 | IIS | XI MIA 3 | 74 | 76 |
| 13 | INH | XI MIA 3 | 50 | 64 |
| 14 | KR | XI MIA 3 | 52 | 70 |
| 15 | MR | XI MIA 3 | 66 | 68 |
| 16 | MAM | XI MIA 3 | 78 | 88 |
| 17 | MECM | XI MIA 3 | 66 | 72 |
| 18 | MSA | XI MIA 3 | 68 | 76 |


| 19 | MBU | XI MIA 3 | 66 | 70 |
| :---: | :---: | :---: | :---: | :---: |
| 20 | MRWP | XI MIA 3 | 70 | 78 |
| 21 | MZ | XI MIA 3 | 58 | 66 |
| 22 | MDS | XI MIA 3 | 58 | 78 |
| 23 | NNA | XI MIA 3 | 60 | 68 |
| 24 | NZA | XI MIA 3 | 72 | 84 |
| 25 | RNJ | XI MIA 3 | 56 | 70 |
| 26 | RPR | XI MIA 3 | 72 | 80 |
| 27 | RF | XI MIA 3 | 78 | 82 |
| 28 | SA | XI MIA 3 | 80 | 80 |
| 29 | UZA | XI MIA 3 | 68 | 76 |
| 30 | UK | XI MIA 3 | 74 | 78 |
| 31 | VNWM | XI MIA 3 | 66 | 70 |
| 32 | WMK | XI MIA 3 | 68 | 78 |

Based on the table 4.2, there were 32 students as sample of the research. The descriptive statistic of experimental class is as follows:
a. Pre-test of Experimental Class

The researcher used SPPS 16.0 version to know the descriptive statistic and the percentage of students' pre-test in experimental class. The percentage divided into five criterions: excellent, good, average, poor and very 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 | Mean | Std. Deviation |
| :--- | ---: | ---: | ---: | :---: | ---: |
| Student's score <br> Valid N <br> (listwise)$\sqrt[32]{ }$ | 50 | 80 | 65.44 | 7.890 |  |

Based on the table 4.3 above, it showed that the minimum score of pre-test was 50 , the maximum score was 80 , and the mean was 65.44

Table 4.4 The Frequency of Students' Pronunciation Achievement before Taught by Using Communicative Drilling

Pretest

|  |  | Frequency |
| :---: | ---: | ---: | ---: | ---: | Percent $\left.$| Valid |
| :---: |
| Percent | | Cumulative |
| :---: |
| Percent | \right\rvert\,

From the table 4.4, The frequency of pretest after being distributed there are not students getting score between 0-39 which means that the students' pronunciation achievement is failed, there are 9 students getting score between 40-59 which means that on the students' pronunciation achievement is low, there are 15 students getting score between $60-70$ which means that on the students' pronunciation achievement is good, there are 8 students getting score between 7184 which means that on the students' pronunciation achievement is very good, there are not students getting score between $85-100$ which means that on the students' pronunciation achievement is excellent.

## b. Post-test of Experimental Class

The researcher used SPPS 16.0 version to know the descriptive statistic and the percentage of students' post-test in experimental class. The percentage divided into five criterions: excellent, good, average, poor and very 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 | Mean | Std. <br> Deviation |
| :--- | ---: | ---: | ---: | ---: | ---: |
| student's score | 32 | 64 | 88 | 74.31 | 5.948 |
| Valid N (listwise) | 32 |  |  |  |  |

Based on the table 4.5 above, it showed that the minimum score of posttest was 64 , the maximum score was 88 , and the mean was 74.31

Table 4.6 The Frequency of Students' Pronunciation Achievement Taught by Using Communicative Drilling

|  |  |  | Post-test |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Valid | 64 | 2 | 6.2 | 6.2 | 6.2 |
|  | 66 | 2 | 6.2 | 6.2 | 12.5 |
|  | Frequency | Percent | Valid <br> Percent | Cumulative <br> Percent |  |
|  | 2 | 6.2 | 6.2 | 18.8 |  |
|  | 70 | 6 | 18.8 | 18.8 | 37.5 |
| 72 | 2 | 6.2 | 6.2 | 43.8 |  |
|  | 74 | 1 | 3.1 | 3.1 | 46.9 |
|  | 76 | 4 | 12.5 | 12.5 | 59.4 |
| 78 | 7 | 21.9 | 21.9 | 81.2 |  |
|  | 80 | 3 | 9.4 | 9.4 | 90.6 |
|  | 82 | 1 | 3.1 | 3.1 | 93.8 |
| 84 | 1 | 3.1 | 3.1 | 96.9 |  |
| 88 | 1 | 3.1 | 3.1 | 100.0 |  |
|  | Total | 32 | 100.0 | 100.0 |  |

From the table 4.6, The frequency of posttest after being distributed there are not students getting score between 0-39 which means that the students' pronunciation achievement is failed, there are not students getting score between 40-59 which means that on the students' pronunciation achievement is low, there are 12 students getting score between $60-70$ which means that on the students' pronunciation achievement is good, there are 19 students getting score between 71-84 which means that on the students' pronunciation achievement is very good, there are 1 student getting score between $85-100$ which means that on the students' pronunciation achievement is excellent.
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' pronunciation achievement taught without using Communicative Drilling Technique

| NO | Name | Class | Pre-test | Post-test |
| :---: | :---: | :---: | :---: | :---: |
| 1 | ANB | XI MIA 2 | 58 | 50 |
| 2 | ARNA | XI MIA 2 | 46 | 64 |
| 3 | ABS | XI MIA 2 | 48 | 60 |
| 4 | A | XI MIA 2 | 64 | 64 |
| 5 | A | XI MIA 2 | 60 | 62 |
| 6 | DWAS | XI MIA 2 | 50 | 52 |
| 7 | EN | XI MIA 2 | 58 | 50 |
| 8 | FGA | XI MIA 2 | 52 | 50 |
| 9 | FE | XI MIA 2 | 60 | 48 |
| 10 | FZ | XI MIA 2 | 64 | 68 |
| 11 | FZF | XI MIA 2 | 72 | 78 |
| 12 | FM | XI MIA 2 | 44 | 62 |
| 13 | IMJ | XI MIA 2 | 48 | 48 |
| 14 | KLA | XI MIA 2 | 68 | 70 |
| 15 | LRU | XI MIA 2 | 56 | 52 |
| 16 | LR | XI MIA 2 | 46 | 54 |
| 17 | MCN | XI MIA 2 | 70 | 62 |
| 18 | MFN | XI MIA 2 | 66 | 70 |
| 19 | MRW | XI MIA 2 | 46 | 48 |
| 20 | NS | XI MIA 2 | 52 | 50 |
| 21 | NKTH | XI MIA 2 | 66 | 50 |
| 22 | NHM | XI MIA 2 | 64 | 58 |
| 23 | NSA | XI MIA 2 | 40 | 44 |
| 24 | NFM | XI MIA 2 | 68 | 70 |
| 25 | PRF | XI MIA 2 | 46 | 50 |
| 26 | RA | XI MIA 2 | 70 | 64 |
| 27 | RPU | XI MIA 2 | 66 | 66 |
| 28 | SSBF | XI MIA 2 | 60 | 52 |
| 29 | SBMI | XI MIA 2 | 70 | 74 |
| 30 | SDYP | XI MIA 2 | 60 | 56 |
| 31 | SLF | XI MIA 2 | 50 | 46 |
|  |  |  |  |  |


| 32 | TAZ | XI MIA 2 | 66 | 60 |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
|  |  |  |  |  |
| 33 | YFA | XI MIA 2 | 42 | 54 |

Based on the table 4.7, there were 33 students as sample of the research. So, there were only 33 students of control class as the sample in this study. The descriptive statistic of control class is as follows:
a. Pre-test of Control Class

The researcher used SPPS 16.0 version to know the descriptive statistic and the percentage of students' pre-test in control class. The percentage divided into five criterions: excellent, good, average, poor and very poor (see table 4.1). The result of the calculation is as follows:

## Table 4.8 Descriptive Statistic of Pre-test <br> Descriptive Statistics

|  | N | Minimum | Maximum | Mean | Std. <br> Deviation |
| :--- | ---: | ---: | ---: | ---: | ---: |
| student's score <br> Valid N <br> (listwise) | 33 | 40 | 72 | 57.45 | 9.608 |

Based on the table 4.8 above, it showed that the minimum score of pre-test was 40 , the maximum score was 72 , and the mean was 57.45

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

|  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Valid | 40 | 1 | 3.0 | 3.0 | 3.0 |
|  | 42 | 1 | 3.0 | 3.0 | 6.1 |
|  | 44 | 1 | 3.0 | 3.0 | 9.1 |
|  | 46 | 4 | 12.1 | 12.1 | 21.2 |
|  | 48 | 2 | 6.1 | 6.1 | 27.3 |
|  | 50 | 2 | 6.1 | 6.1 | 33.3 |
|  | 52 | 2 | 6.1 | 6.1 | 39.4 |
|  | 56 | 1 | 3.0 | 3.0 | 42.4 |
|  | 58 | 2 | 6.1 | 6.1 | 48.5 |
|  | 60 | 4 | 12.1 | 12.1 | 60.6 |
|  | 64 | 3 | 9.1 | 9.1 | 69.7 |
|  | 66 | 4 | 12.1 | 12.1 | 81.8 |
|  | 68 | 2 | 6.1 | 6.1 | 87.9 |
|  | 70 | 3 | 9.1 | 9.1 | 97.0 |
|  | 72 | 1 | 3.0 | 3.0 | 100.0 |
|  | Total | 33 | 100.0 | 100.0 |  |

From the table 4.9, The frequency of pretest after being distributed there are not students getting score between 0-39 which means that the students' pronunciation achievement is failed, there are 16 students getting score between 40-59 which means that on the students' pronunciation achievement is low, there are 16 students getting score between $60-70$ which means that on the students' pronunciation achievement is good, there are 1 students getting score between 7184 which means that on the students' pronunciation achievement is very good,
there are not students getting score between 85-100 which means that on the students' pronunciation achievement is excellent.

## a. Post-test of Control Class

The researcher used SPPS 16.0 version to know the descriptive statistic and the percentage of students' post-test in control class. The percentage divided into five criterions: excellent, good, average, poor, and very 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 | Mean | Std. <br> Deviation |
| :--- | ---: | ---: | ---: | ---: | ---: |
| student's score <br> Valid N <br> (listwise)$\quad 33$ | 44 | 78 | 57.76 | 8.983 |  |

Based on the table 4.10 above, it showed that the minimum score of posttest was 44 , the maximum score was 78 , and the mean was 57.76 .

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

|  |  |  | Valid <br> Frequency | Cumulative <br> Percent |
| :---: | ---: | ---: | ---: | ---: |
| Valid | 44 | 1 | 3.0 | 3.0 |
| 46 | 1 | 3.0 | 3.0 | 3.0 |
| 48 | 3 | 9.1 | 9.1 | 15.2 |
| 50 | 6 | 18.2 | 18.2 | 33.3 |
| 52 | 3 | 9.1 | 9.1 | 42.4 |
| 54 | 2 | 6.1 | 6.1 | 48.5 |
| 56 | 1 | 3.0 | 3.0 | 51.5 |
| 58 | 1 | 3.0 | 3.0 | 54.5 |
| 60 | 2 | 6.1 | 6.1 | 60.6 |
| 62 | 3 | 9.1 | 9.1 | 69.7 |
| 64 | 3 | 9.1 | 9.1 | 78.8 |
| 66 | 1 | 3.0 | 3.0 | 81.8 |
| 68 | 1 | 3.0 | 3.0 | 84.8 |
| 70 | 3 | 9.1 | 9.1 | 93.9 |
| 74 | 1 | 3.0 | 3.0 | 97.0 |
| 78 | 1 | 3.0 | 3.0 | 100.0 |
| Total | 33 | 100.0 | 100.0 |  |

From the table 4.11, The frequency of posttest after being distributed there are not students getting score between 0-39 which means that the students' pronunciation achievement is failed, there are 18 students getting score between 40-59 which means that on the students' pronunciation achievement is low, there are 13 students getting score between $60-70$ which means that on the students' pronunciation achievement is good, there are 2 students getting score between 7184 which means that on the students' pronunciation achievement is very good,
there are not students getting score between 85-100 which means that on the students' pronunciation achievement is excellent.

## B. Hypothesis Testing

1. $\mathrm{H}_{0}: \mu_{1} \leq \mu_{2}$ or the mean of the experimental group is smaller than or equal to the mean of the control one.

Null Hypothesis (Ho) that there is no significant difference scores between the students' pronunciation achievement using communicative drilling.
2. $\mathrm{H}_{1}: \mu_{1}>\mu_{2}$ or the mean of the experimental group is bigger than the mean of the control one.

Alternative Hypothesis (Ha) that there is significant difference scores between the students' pronunciation achievement using communicative drilling.

To know whether there is any significant difference on students' pronunciation achievement between students who were taught and who were not taught by using communicative drilling technique, 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 Statistics

|  | Class | N | Mean | Std. Deviation | Std. <br> Error <br> Mean |
| :---: | :---: | :---: | :---: | :---: | :---: |
| The Result of Pronunciation Achievement | Experimental Class | $\begin{aligned} & 32 \\ & 33 \end{aligned}$ | 74.31 | 5.948 | 1.052 |
|  | Control Class |  | 57.76 | 8.983 | 1.564 |

Table 4.13 The Output of Independent Sample Test Independent Samples Test

|  |  | The Result of Pronunciation <br> Achievement |  |
| :--- | :--- | ---: | ---: |
|  |  | Equal <br> variances <br> assumed | Equal <br> variances not <br> assumed |
| Levene's Test for <br> Equality of <br> Variances | F | 8.496 |  |
| t-test for Equality | Tig. | .005 |  |
| of Means | Df | 8.732 | 8.785 |
|  | Sig. (2-tailed) | 63 | 55.723 |
|  | Mean Difference | .000 | .000 |
|  | Std. Error Difference | 16.555 | 16.555 |
|  | 95\% Confidence | Lower | 1.896 |
|  | Interval of the | Upper | 12.766 |
|  | Difference | 20.344 | 12.780 |
|  |  |  | 20.330 |

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 0,005 . It means that 0,005 is smaller is 0,05 and Ho is rejected. 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 4.12, the data presented are the performance scores of the members of one group which the students who were taught using communicative drilling and without communicative drilling in pronunciation achievement. Output independent sample statistics shows that there are mean scores differences between experimental class and control class. The mean score of experimental class is 74.31 . The mean score of control class is 57.76 . So, the mean score of experimental class is higher than the mean score ofcontrol class. It means that the student's score increase being taught using communicative drilling inpronunciation achievement. The number of subjects or experimental class of each sample ( N ) is 32 students and control class is 33 students. Meanwhile, standard deviation of experimental class (5.948) and standard deviation of control class is (8.983). Mean standard error for experimental class is (1.052), while mean standard error for control class is (1.564). So, we can conclude that the value increases being taught using communicative drilling in pronunciation achievement.

Based on table 4.13 , the t -value is 8.732 , with the $\mathrm{df}=63$, and the p -value (two-tailed) is 0.000 . Given that the present test is one-tailed test, so the p -value ( 0.000 ) is divide to: $0.000 / 2=0.000$. The significance level is 0.05 . For interpretation of decision based on the result of probability achievement, that is:
a. If the probability value $(\mathrm{sig})>0.05$ then the null hypothesis is not rejected.
b. If the probability value $(\mathrm{sig})<0.05$ then the null hypothesis is 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 of the experimental group is smaller than or equal to the mean of the control one is rejected. It automatically accepts the alternative hypothesis saying that the mean of the experimental group is bigger than the mean of the control one.

## C. Discussion

As discussed of research method in the teaching and learning process was divided into three steps. First step was preliminary study by which conducted a preliminary study to know the students' pronunciation achievement by administering being taught using communicative drilling and without communicative drilling. The second was given treatment to the students; the treatment used in this study is communicative drilling. Communicative drilling is one of Audio Lingual Method. According to Haycraft (1978: 36), in which the primary focus is on the form of the language. The students have to process the language and they have the opportunity to interact with the input. The language that they hear will be grammar and match it to the expression or utterance according to the grammar. Then, when the students produce utterance, they will follow the grammatical rules. This kind of drilling is quite the same with the other drilling types, but the emphasis is that at the end the students can include any other information which contains the communicative value.

Students' pronunciation achievement is low. It is proved by when they are taught without communicative drilling. As we know from the research findings, the students which are taught communicative drilling have lower score than
communicative drilling. It is proved by the calculation of mean score on experimental class was 74.31 and control class was 57.76.

As we know from the research findings, the students which are taught using communicative drilling have higher score than without are taught using communicative drilling. It is proved by the calculation of mean score of mean score on experimental class was 74.31 and control class was 57.76 . So, the researcher concluded that this strategy is very useful to make the students more active, and improve students' pronunciation achievement. According to the mean score, the mean score of experimental class is higher than the mean score of control class. It also means that teaching pronunciation using communicative drilling is better than teaching pronunciation taught without communicative drilling .

Based on table 4.13, the t -value is 8.732 , with the $\mathrm{df}=63$, and the p -value (two-tailed) is 0.000 . Given that the present test is one-tailed test, so the p -value ( 0.000 ) is divide to: $0.000 / 2=0.000$. The significance level is 0.05 . Since 0.000 is smaller than significance level ( $\alpha$ ) $5 \%$. The null hypothesis is rejected. In other word, the hypothesis saying that the mean of the experimental group is smaller than or equal to the mean of the control one is rejected. It automatically accepts the alternative hypothesis saying that the mean of the experimental group is bigger than the mean of the control one.

The finding of this research stating that communicative drilling is considered as an effective for the students'pronunciation achievement, it also
could be seen in the treatment process, the students are more interested when the researcher applied this technique. The students helps the students memorize the language by the teacher's control and makes the teacher can correct any mistakes that students make and encourage them to concrete on difficulties at the sometime.

Regarding on the result of data analysis above, it's also strongly with previous study as stating that communicative drilling is considered as an effective for the students' pronunciation achievement. The first is article written by Riswanto and Haryanto conduted research entitled Improving Students' Pronunciation through Communicative Drilling Technique at Senior High School (SMA) 07 South Bengkulu, Indonesia. The method of this research is classroom action research (CAR). The respondents of this research are X2 students of SMAN 07 South Bengkulu which consist of 30 students. Based on result of data analysis there is improvements on students' pronunciation achievement in each cycle. This research indicates that the using of drilling technique can improve students' pronunciation achievement at the first year students of SMAN 07 South Bengkulu academic year 20011/ 2012.

The second is article written by Nurina Ulfa conduct research entitled $A$ Comparative Study between Communicative Drill and Role Play towards Students' Speaking Achievement at the First Grade of SMAN 7 Bandar Lampung. This research was quantitative research using Two Groups Pre-test Post-test Design. After getting the data, the researcher analyzed it using Paired Sample ttest. The result showed that the mean score of post-test in the Communicative Drill class was 76.85 and the mean of post-test in the Role Play class was 87.42 .

Alpha ( $\alpha$ ) was 0.00 and it showed that it was lower than $0.05(\alpha<0.05)$. It means that Role Play had higher gain than Communicative Drilling in teaching speaking. The aspect that increased the most in Communicative Drilling was fluency and pronunciation in Role Play. On the other hand, Communicative Drilling needed the students to do the conversation based on the guided reply, so it made them difficult to develop their own conversation

From the explanation above, it can be conclude that communicative drilling is effective in this research. And the strategy above is accepted by the researcher, especially in understanding the pronunciation achievement to the senior high school, because it can improve the students' pronunciation achievement at the eleventh grade of MAN 3 Tulungagung in academic year 2017/2018.

