## CHAPTER IV

## FINDINGS AND DISCUSSION

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

## A. Research Findings

In this chapter, the researcher presents the descriptive statistics of the research result and also discusses an analysis of the ability of the second grade of SMKN 1 Boyolangu Tulungagung in reading comprehension mastery when they were taught with and without by using 3 H strategy. The samples of this research are two classes, the first class is MM 1 as control group which include 35 students and the second class OTKP 1 as experimental group which include 36 students. The data of this research were the pre-test scores and post-test scores of experimental group and control group. After getting the result of pretest and post-test of experimental group, the researcher showed the data below:

Table 4.1

## Statistical Data of Pre-Test and Post-Test Score in the

## Experimental Class

|  | Statistics |  |
| :--- | ---: | ---: |
| Valid | pretest | posttest |
| N Missing | 36 | 36 |
|  | 0 | 0 |
| Mean | 69.11 | 84.67 |
| Std. Error of Mean | 1.943 | 1.051 |
| Median | 68.00 | 84.00 |
| Mode | 68 | 80 |
| Std. Deviation | 11.656 | 6.306 |
| Variance | 135.873 | 39.771 |
| Range | 52 | 20 |
| Minimum | 44 | 76 |
| Maximum | 96 | 96 |
| Sum | 2488 | 3048 |

The table 4.1 above shows that mean of pre-test was 69.11 and mean of the post-test was 84.67 higher than pre-test. The median in the pre-test was 68.00 and 84.00 in the post-test. The mode of pre-test was 68 and 80 in the post-test. The standard deviation in the pre-test was 11.656 and 6.306 in the post-test. The range in the pre-test was 52 and in the post-test was 20 . The minimum score in the pre-test was 44 and 76 in the post-test. The maximum score in the pre-test was 96 and also 96 in the post-test. The summary of pre-test was 2488 and in the posttest was 3048. In addition, the researcher organized the percentage and the frequency of the test can be seen in the table below:

## Table 4.2

## Frequency of Pre-Test of Experimental Class.

|  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Valid | 44 | 1 | 2.8 | 2.8 | 2.8 |
|  | 48 | 1 | 2.8 | 2.8 | 5.6 |
|  | 56 | 2 | 5.6 | 5.6 | 11.1 |
|  | 60 | 6 | 16.7 | 16.7 | 27.8 |
|  | 64 | 3 | 8.3 | 8.3 | 36.1 |
|  | 68 | 10 | 27.8 | 27.8 | 63.9 |
|  | 72 | 4 | 11.1 | 11.1 | 75.0 |
|  | 76 | 1 | 2.8 | 2.8 | 77.8 |
|  | 80 | 4 | 11.1 | 11.1 | 88.9 |
|  | 84 | 1 | 2.8 | 2.8 | 91.7 |
|  | 92 | 1 | 2.8 | 2.8 | 94.4 |
|  | 96 | 2 | 5.6 | 5.6 | 100.0 |
|  | Total | 36 | 100.0 | 100.0 |  |

In the table 4.2 above, 1 students or $2.8 \%$ got 44,1 students or $2.8 \%$ got 48,2 students or $5.6 \%$ got 56,6 students or $16.7 \%$ got 60,3 students or $8.3 \%$ got 64,10 students or $27.8 \%$ got 68,4 students or $11.1 \%$ got 72,1 students or $2.8 \%$ got 76,4 students or $11.1 \%$ got 80,1 students or $2.8 \%$ got 84 , 1 students or $2.8 \%$ got 92,2 students or $5.6 \%$ got 96 .

Table 4.3

## Frequency of Post-Test of Experimental Class

|  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Valid | 76 | 4 | 11.1 | 11.1 | 11.1 |
|  | 80 | 12 | 33.3 | 33.3 | 44.4 |
|  | 84 | 7 | 19.4 | 19.4 | 63.9 |
|  | 88 | 4 | 11.1 | 11.1 | 75.0 |
|  | 92 | 5 | 13.9 | 13.9 | 88.9 |
|  | 96 | 4 | 11.1 | 11.1 | 100.0 |
|  | Total | 36 | 100.0 | 100.0 |  |

In table above, 4 student or $11.1 \%$ got 76, 12 students or $33.3 \%$ got 80,7 students or $19.4 \%$ got 84,4 students or $11.1 \%$ got 88,5 students or $13.9 \%$ got 92 , and 4 students or $11.1 \%$ got 96 . It can conclude that, after the treatment, most of the students got improved their score than their pre-test score.

From the table 4.2 and 4.3 above also can be seen in the histogram chart below:

Histogram chart from the table pre-test 4.2 above can be seen below:

Figure 4.1 Histogram Chart of Frequency of Pre-Test of
Experimental Class.


Histogram chart from the table post-test 4.3 above can be seen below:

Figure 4.2 Histogram Chart of Frequency of Post-Test of Experimental Class


Based on the table 4.2 and 4.3 above, the researcher makes the categorization of the students score as follow:

## Table 4.4

Categorization of the Students' Score in Pre-Test of Experimental Class

| Intervals | Frequency | Categorization | Percentage |
| :--- | :--- | :--- | :--- |
| $81-100$ | 4 | Excellent | $11 \%$ |
| $61-80$ | 22 | Good | $61 \%$ |
| $41-60$ | 10 | Fair/Enough | $28 \%$ |
| $0-40$ | 0 | Poor | $0 \%$ |

Based on the table of the categorization above, it showed that in pre-test there were 4 students or $11 \%$ got the score 81 - 100 in excellent categorization, 22 students or $61 \%$ got the score $61-80$ in good categorization, and 10 students or $28 \%$ got $41-60$ in fair or enough categorization.

Table 4.4 above also can see on the diagram above:

## Figure 4.3 the circle Diagram of Categorization of the Students'

## Score in Pre-Test of Experimental Class



Based on the diagram above, the major of the shading in the pie diagram was dark orange color as good categorization, the blue color as excellent, and the grey color as fair or enough categorization.

Table 4.5

## Categorization of the Students' Score in Post-Test of

## Experimental Class

| Intervals | Frequency | Categorization | Percentage |
| :--- | :--- | :--- | :--- |
| $81-100$ | 20 | Excellent | $56 \%$ |
| $61-80$ | 16 | Good | $44 \%$ |
| $41-60$ | 0 | Fair/Enough | $0 \%$ |
| $0-40$ | 0 | Poor | $0 \%$ |

Based on the table of the categorization above, it showed that in post-test there were 20 student or $56 \%$ got 81 - 100 in excellent categorization, and 16 students or $44 \%$ got 61 - 80 in good categorization.

Table 4.5 also can see on the diagram below:
Figure 4.4 the Circle Diagram Categorization of the Students'

## Score in Post-Test of Experimental Class



Based on the diagram above, the major of the shading in the pie diagram was blue color as excellent, and the dark orange color as good categorization.

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

Table 4.6

## Statistical Data of Pre-Test and Post-Test Score in the Control

## Class

| Statistics |  |  |
| :--- | ---: | ---: |
|  | pretest | posttest |
| N Valid | 35 | 35 |
|  | Missing | 0 |
| Mean |  | 0 |
| Std. Error of Mean | 2.312 | 73.71 |
| Median | 76.00 | 76.00 |
| Mode | 60 | 76 |
| Std. Deviation | 13.679 | 6.948 |
| Variance | 187.106 | 48.269 |
| Range | 40 | 24 |
| Minimum | 60 | 60 |
| Maximum | 100 | 84 |
| Sum | 2688 | 2580 |

Based on the table 4.6 above, the table shows that mean of pretest was 76.80 and mean of the post-test was 73.71 lower than pre-test. The median in the pre-test was 76.00 and 76.00 in the post-test. The mode of pre-test was 60 and 76 in the post-test. The standard deviation
in the pre-test was 13.679 and 6.948 in the post-test. The range in the pre-test was 40 and in the post-test was 24 . The minimum score in the pre-test was 60 and 60 in the post-test. The maximum score in the pretest was 100 and 84 in the post-test. The summary of pre-test was 2688 and in the post-test was 2580 lower than pre-test. In addition, the researcher organized the percentage and the frequency of the test can be seen in the table below:

Table 4.7

Frequency of Pre-test of Control Class

|  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Valid | 60 | 9 | 25.7 | 25.7 | 25.7 |
|  | 64 | 2 | 5.7 | 5.7 | 31.4 |
|  | 68 | 2 | 5.7 | 5.7 | 37.1 |
|  | 72 | 1 | 2.9 | 2.9 | 40.0 |
|  | 76 | 5 | 14.3 | 14.3 | 54.3 |
|  | 80 | 3 | 8.6 | 8.6 | 62.9 |
|  | 84 | 2 | 5.7 | 5.7 | 68.6 |
|  | 88 | 4 | 11.4 | 11.4 | 80.0 |
|  | 92 | 3 | 8.6 | 8.6 | 88.6 |
|  | 96 | 1 | 2.9 | 2.9 | 91.4 |
|  | 100 | 3 | 8.6 | 8.6 | 100.0 |
|  | Total | 35 | 100.0 | 100.0 |  |

In the table 4.7 above, 9 students or $25.7 \%$ got 60, 2 students or $5.7 \%$ got 64,2 students or $5.7 \%$ got 68,1 students or $2.9 \%$ got 72,5 students or $14.3 \%$ got 76,3 students or $8.6 \%$ got 80,2 students or $5.7 \%$
got 84,4 students or $11.4 \%$ got 88,3 students or $8.6 \%$ got 92,1 students or $2.9 \%$ got 96 , and 3 students or $8.6 \%$ got 100 .

Table 4.8

## Frequency of Post-test of Control Class

|  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Valid | 60 | 1 | 2.9 | 2.9 | 2.9 |
|  | 64 | 7 | 20.0 | 20.0 | 22.9 |
|  | 68 | 1 | 2.9 | 2.9 | 25.7 |
|  | 72 | 7 | 20.0 | 20.0 | 45.7 |
|  | 76 | 10 | 28.6 | 28.6 | 74.3 |
|  | 80 | 4 | 11.4 | 11.4 | 85.7 |
|  | 84 | 5 | 14.3 | 14.3 | 100.0 |
|  | Total | 35 | 100.0 | 100.0 |  |

In the table 4.8 above, 1 student or $2.9 \%$ got 60,7 students or $20.0 \%$ got 64,1 student or $2.9 \%$ got 68,7 students or $20.0 \%$ got 72,10 students or $28.6 \%$ got 76,4 students or $11.4 \%$ got 80 , and 5 students or $14.3 \%$ got 84. It can conclude that, after the treatment, some of students got improved their score and also there are some of students got lower score than their pre-test score.

From the table 4.7 and 4.8 above also can be seen in the histogram chart below:

Histogram chart from the table pre-test 4.7 above can be seen below:

Figure 4.5 Histogram Chart of Frequency of Pre-Test Control
Class.


Histogram chart from the table post-test 4.8 above can be seen below:

Figure 4.6 Histogram Chart of Frequency of Post-Test of Control Class


Based on the table 4.6 and 4.7 above, the researcher makes the categorization of the students score as follow:

## Table 4.9

## Categorization of the Students' Score in Pre-Test of Control

## Group

| Intervals | Frequency | Categorization | Percentage |
| :--- | :--- | :--- | :--- |
| $81-100$ | 13 | Excellent | $37 \%$ |
| $61-80$ | 13 | Good | $37 \%$ |
| $41-60$ | 9 | Fair/Enough | $26 \%$ |
| $0-40$ | 0 | Poor | $0 \%$ |

Based on the table of the categorization above, it showed that in pre-test there were 13 students or $37 \%$ got the score $81-100$ in excellent categorization, also 13 students or $37 \%$ got the score $61-80$ in good categorization, and 9 students or $26 \%$ got $41-60$ in fair or enough categorization.

Table 4.9 above also can see on the diagram above:
Figure 4.7, the circle Diagram of Categorization of the Students'
Score in Pre-Test of Control Class


Based on the diagram above, the major of the shading in the pie diagram was dark orange color as good categorization and also the blue color as excellent, and the grey color as fair or enough categorization.

Table 4.10

## Categorization of the Students' Score in Post-Test of Control

## Group

| Intervals | Frequency | Categorization | Percentage |
| :--- | :--- | :--- | :--- |
| $81-100$ | 5 | Excellent | $14 \%$ |
| $61-80$ | 29 | Good | $83 \%$ |
| $41-60$ | 1 | Fair/Enough | $3 \%$ |
| $0-40$ | 0 | Poor | $0 \%$ |

Based on the table of the categorization above, it showed that in post-test there were 5 student or $14 \%$ got $81-100$ in excellent categorization, 29 students or $83 \%$ got $61-80$ in good categorization, and 1 student or 3\% got 41-60 in fair or enough categorization.

Table 4.10 also can see on the diagram below:
Figure 4.8, the Circle Diagram Categorization of the Students'
Score in Post-Test of Control Class


Based on the diagram above, the major of the shading in the pie diagram was dark orange color as good categorization, the blue color as excellent, the grey color as fair or enough categorization and the bright orange color as poor categorization.

## B. Hypothesis testing

There were two hypotheses that f and t hypothesis. Before discussing the t -test, the researcher needed to test the f-test. F-test is used to know the equality of variance of the two groups, and the $t$-test was used to test the two means of experimental and control group. Although, the f-test was automatically served in the table of t-test, the researcher writes down f hypothesis as requirement in quasi experiment. The hypothesis of this research is as follow:

1. Hypothesis testing of F-test
a. Ho: $\sigma 1^{2}=\sigma 2^{2}$, it means if there is an equal variance between experimental and control group.
b. Ha: $\sigma 1^{2} \neq \sigma 2^{2}$, it means if there is no equal variance between experimental and control group.
1) If $p$-value (Sig) bigger than 0.05 the null hypothesis (Ho) is not rejected. As such, equal variances is used
2) If $p$-value (Sig) less than 0.05 than the null hypothesis (Ho) is rejected. As such, equal variances not assumed is used
2. Hypothesis testing of T-test
a. Null Hypothesis (Ho)

Null hypothesis states that there is no significant difference on students' reading comprehension achievement taught with and without by 3 H (Here, Hidden, and in my Head) Strategy.
b. Alternative Hypothesis (Ha)

Alternative hypothesis states that there is significant difference on students' reading comprehension achievement taught with and without by using 3H (Here, Hidden, and in my Head) Strategy.

1) If $\operatorname{sig}(2$-tailed) is smaller than 0.05 the alternative hypothesis (Ha) is not rejected and the null hypothesis (Ho) is rejected.
2) If $\operatorname{sig}(2$-tailed) is bigger than 0.05 the alternative hypothesis (Ha) is rejected and the null hypothesis (Ho) is not rejected.

To know whether there is significant difference score on students' reading comprehension achievement taught with and without by using 3H (Here, Hidden, and in my Head) Strategy, the researcher analyzed the data by using SPSS 21 version, the result can be seen on the table below:

Table 4.11 result of $\mathbf{t}$-test

Group Statistics

|  | class | N | Mean | Std. Deviation | Std. Error <br> Mean |
| :--- | :--- | ---: | ---: | ---: | ---: |
| posttest result | class e | 36 | 84.67 | 6.306 | 1.051 |
|  | class c | 35 | 73.71 | 6.948 | 1.174 |

Based on table 4.11, it showed of pretest result of two class of experiment class (class e) and control class (class c), first experiment class, showed in N cell there was 36, mean score for experiment class 84.67, standard deviation for experiment class 6.306, and standard error mean for experiment class 1.051. While in control class, showed in N cell there was 35 , mean score for control class 73.71 , standard deviation for control class 6.948, and standard error mean for control group 1.174. from the result above it was conclude that there is significant difference score on students' reading comprehension achievement taught with and without by using 3 H (Here, Hidden, and in my Head) Strategy.

Table 4.12. Result of $\mathbf{t}$-Test
Independent Samples Test


Based on the table 4.12 above, it showed that f was 0.203 bigger than 0.050 and Ho was accepted. It can be concluded that both variance experimental and control group are the same. The result is the writer used equal variance assumed in making decision of $t$-test.

Based on the table 4.12, the significant value of the $t$ (2-tailed) was 0.000 lower than 0.050 so, it can conclude that there is a significant difference in the students' achievement between the experimental group and the control group in reading comprehension mastery. It means that the alternative hypothesis (Ha) was accepted and the null hypothesis (Ho) was rejected or it can conclude that there is significant difference score on students' reading comprehension achievement taught with and without by using 3H (Here, Hidden, and in my Head) Strategy.

## C. Discussion

From the data analysis above, the data were analyzed with the helped of SPSS program 21 version. The calculation of the achievement using t-test showed that there was significant difference of students' achievement before and after those who were taught by using 3 H strategy and those who were not. The mean of control group in pre-test was 76.80 and in post-test 73.71 lower than pre-test. Then, the mean of experimental group of pre-tests was 69.11 and in post-test 84.67 higher than pre-test result.

It can be interpreted that the reading comprehension mastery of the student had been improved after they are getting treatment. On the output of $t$-test showed that the significant value of the $t$ (2-tailed) was 0.000 lower than the significant 0.050 . Because it was lower than the significant 0.050 it can conclude that there was a significant difference in the students' achievement between the experimental and the control groups in reading comprehension mastery. It means that the alternative hypothesis (Ha) was accepted and the null hypothesis (Ho) was rejected. In other words, it can be concluded that there was a significant difference on students' score in the teaching reading comprehension between those who were taught by using 3H (Hidden, Here, and in my Head) strategy and those who were not.

From the result of data analysis above, 3 H (Hidden, Here, and in my Head) strategy can be a good strategy to teach the students for reading comprehension mastery. Graham and Wong in Westwood (2001:61) state that 3 H strategy is used to teach the students to find the answer of the questions. It means, generally, 3H strategy help students to improve their reading comprehension mastery especially in answer the question whether explicit, implicit, and in the students' background knowledge.

The result of this research was also similar to the previous studies. The first previous study from Nina Anggraini (2014) from English Language Education Study Program of FKIP Untan with the title "Teaching Reading Comprehension by Using 3H (Here, Hidden, and in my Head) Strategy" to the eight grade students of SMPN 2 Pontianak in academic year 2013/2014. She is also used quasi experiment that include control and experimental group. For the posttest result of her research, the mean of her experimental class was 78.34 and for post-test result of her control group was 70.16. It can conclude from her research result that there is significant difference with and without taught by using 3H strategy. And although the findings of this research and Nina Anggraini research were the same, the 3 H (Hidden, Here and in my Head) was effective in teaching reading comprehension mastery.

The second was a study from Novianti Sri Rejeki (2013) from UIN SUKA RIAU. With the title "The Effect of Using 3H (Here, Hidden and in my Head) strategy towards Reading Comprehension in Narrative Text of The First Year Students at SMAN 1 Tapung of Kampar Regency". She also used quasi experiment that include two classes of control and experimental group. She found that 3 H (Here, Hidden and in my Head) strategy was effective to improve students in reading comprehension mastery. It could be seen from her research result score, it showed that the mean of control group was 4.69 and for experimental group was 8.69 . From the data, it also can conclude that there was significant difference with and without taught by using 3 H (Here, Hidden and in my Head) strategy. Although the finding of this research and Novianti Sri Rejeki were the same, that 3H (Here, Hidden and in my Head) strategy was effective in teaching reading comprehension.

Furthermore, this research also confirmed some research theories from the expert. In this study, the writer focused on the use of 3H (Here, Hidden and in my Head) strategy to improve students' academic in reading comprehension mastery especially in answer questions. This is based on statement by Graham (1992:31) "once students were introduced to the 3 H strategy, the following points were brought to their attention: (a) some questions have no answer; (b) some questions have more than correct answer; and (c) the answer to some
questions change over time." According to Graham and Wong in Westwood (2001:61) using 3H strategy can help students improve their reading comprehension.

Based on the explanation above, 3H (Here, Hidden and in my Head) strategy This strategy does not simply direct students to look back in the text or read in random way if they cannot respond to the question after passage. Instead, this strategy helps them to read strategically. Then, this strategy also helps students to use their background knowledge in answering comprehension question, not merely based on the text. And this strategy also makes the students to improve their reading comprehension mastery. It can be concluded that the use of 3 H (Here, Hidden and in my Head) strategy was effective toward reading comprehension mastery of the second-grade students at SMKN 1 Boyolangu Tulungagung.

Overall, it can be said that 3H (Here, Hidden and in my Head) strategy in teaching reading comprehension is not only good strategy on senior high school or junior high school but also it can be good strategy for vocational school which school more emphasis on practice directly than theory. This strategy also good for every types of text. Teaching reading comprehension by using 3 H (Here, Hidden and in my Head) strategy is effective to increase student's achievement in the level of second grade students of senior high school (SMKN 1 Boyolangu).

