## CHAPTER IV

## FINDINGS AND DISCUSSION

## A. Findings

In this chapter, the writer presents the data that have been collected in the research. The presentation covers data about the comparative study between male and female students in mastering degree of comparison of the eighth grade students MTs Nipa and Nipi Rakha Amuntai in the academic year 2015/2016.

1. Result of Male and Female Students in Mastering Degree of Comparison of the Eighth Grade MTs Nipa and Nipi Rakha Amuntai in the Academic Year 2015/2016

This sub-section presents the data of male and female students of the eight grade students MTs Nipa and Nipi Rakha Amuntai in mastering degree of comparison. To know about male and female students in mastering degree of comparison, the writer conducted a written test at 09.30 a.m. on May, $5^{\text {th }}$ 2016 at classroom of MTs Nipa Rakha and at 10.30 a.m. on May, $5^{\text {th }}$ at classroom of MTs Nipi Rakha. It was done in 40 minutes for each major to answer 44 questions.

Based on the test, the writer got the data about male and female students' scores in answering the test regarding the degree of comparison that can be seen in these tables below:

Table 4.1 Male students' test result in mas tering degree of comparison of the eighth grade MTs Nipa Rakha Amuntai in academic year 2015/2016

| Subject Number | Multiple Choice | Score |
| :---: | :---: | :---: |
| 1 | 41 | 93,18 |
| 2 | 40 | 90,91 |
| 3 | 32 | 72,73 |
| 4 | 31 | 70,45 |
| 5 | 29 | 65,91 |
| 6 | 25 | 56,82 |
| 7 | 28 | 63,64 |
| 8 | 32 | 72,73 |
| 9 | 32 | 72,73 |
| 10 | 33 | 75,00 |
| 11 | 40 | 90,91 |
| 12 | 36 | 81,82 |
| 13 | 27 | 61,36 |
| 14 | 27 | 61,36 |
| 15 | 25 | 56,82 |
| 16 | 25 | 56,82 |
| 17 | 40 | 90,91 |

Table 4.1 (Continued)

| Subject Number | Multiple Choice | Score |
| :---: | :---: | :---: |
| 18 | 39 | 88,64 |
| 19 | 25 | 56,82 |
| 20 | 30 | 68,18 |
| 21 | 41 | 93,18 |
| 22 | 25 | 56,82 |
| 23 | 28 | 63,64 |
| 24 | 27 | 61,36 |
| 25 | 26 | 59,09 |
| 26 | 41 | 93,18 |
| 27 | 38 | 86,36 |
| 28 | 33 | 75,00 |
| 29 | 40 | 90,91 |
| 30 | 27 | 61,36 |
| 31 | 41 | 93,18 |
| 32 | 26 | 59,09 |
| 33 | 41 | 93,18 |
| 34 | 34 | 77,27 |
| 35 | 39 | 88,64 |

## Table 4.1 (Continued)

| Subject Number | Multiple Choice | Score |
| :---: | :---: | :---: |
| 36 | 32 | 72,73 |
| 37 | 38 | 86,36 |
| 38 | 27 | 61,36 |
| 39 | 39 | 88,64 |
| 40 | 40 | 90,91 |
| 41 | 30 | 68,18 |
| 42 | 31 | 70,45 |
| 43 | 26 | 59,09 |
| 44 | 28 | 63,64 |
| 45 | 27 | 61,36 |
| Total |  | 3.322,73 |

Based on the table above, it is found that the highest score of male students of the eighth grade MTs Nipa Rakha Amuntai is 93,18, while the lowest score is 59,09. Then, the accumulated score is $3.322,73$.

Next, to know male students' mastery in degree of comparison of the eighth grade MTs Nipa Rakha Amuntai, the writer uses the accounting of mean score as follow:
$\mathrm{M}_{1}=\frac{\sum ?}{?}$
$\mathrm{M}_{1}=\frac{? \text { ?ç?? ?? }}{? ?}$
$\mathrm{M}_{1}=73,84$
From the data above, it shows that the male students' mean score is 73,84 . Thus, male students' mastery in degree of comparison of the eighth grade MTs Nipa Rakha Amuntai can be concluded in the good category.

Furthermore, in order to count the t -test to answer the third question of the research easily, the writer counted the total value based on the mean which has been calculated above to know the Standard Deviation value of this group. The data about this is showed in the table below:

Table 4.2 Working table of data analysis of male students' mastery in degree of comparison of the eighth grade MTs Nipa Rakha Amuntai 2015/2016

| Subject Number | Nilai $A ?$ | $? A ?-? ?$ | $? ?$ |
| :---: | :---: | :---: | :---: |
| 1 | 93,18 | 19,34 | 374,11 |
| 2 | 90,91 | 17,07 | 291,35 |
| 3 | 72,73 | $-1,11$ | 1,24 |
| 4 | 70,45 | $-3,39$ | 11,46 |
| 5 | 65,91 | $-7,93$ | 62,90 |
| 6 | 56,82 | $-17,02$ | 289,74 |
| 7 | 63,64 | $-10,20$ | 104,11 |
| 8 | 72,73 | $-1,11$ | 1,24 |

Table 4.2 (Continued)

| Subject Number | Nilai $/$ ? | ? A? - ? | ?? |
| :---: | :---: | :---: | :---: |
| 9 | 72,73 | -1,11 | 1,24 |
| 10 | 75,00 | 1,16 | 1,35 |
| 11 | 90,91 | 17,07 | 291,35 |
| 12 | 81,82 | 7,98 | 63,65 |
| 13 | 61,36 | -12,48 | 155,66 |
| 14 | 61,36 | -12,48 | 155,66 |
| 15 | 56,82 | -17,02 | 289,74 |
| 16 | 56,82 | -17,02 | 289,74 |
| 17 | 90,91 | 17,07 | 291,35 |
| 18 | 88,64 | 14,80 | 218,93 |
| 19 | 56,82 | -17,02 | 289,74 |
| 20 | 68,18 | -5,66 | 32,02 |
| 21 | 93,18 | 19,34 | 374,11 |
| 22 | 56,82 | -17,02 | 289,74 |
| 23 | 63,64 | -10,20 | 104,11 |
| 24 | 61,36 | -12,48 | 155,66 |
| 25 | 59,09 | -14,75 | 217,54 |
| 26 | 93,18 | 19,34 | 374,11 |
| 27 | 86,36 | 12,52 | 156,84 |

Table 4.2 (Continued)

| Subject Number | Nilai $/$ ? | ? A? - ? | ?? |
| :---: | :---: | :---: | :---: |
| 28 | 75,00 | 1,16 | 1,35 |
| 29 | 90,91 | 17,07 | 291,35 |
| 30 | 61,36 | -12,48 | 155,66 |
| 31 | 93,18 | 19,34 | 374,11 |
| 32 | 59,09 | -14,75 | 217,54 |
| 33 | 93,18 | 19,34 | 374,11 |
| 34 | 77,27 | 3,43 | 11,78 |
| 35 | 88,64 | 14,80 | 218,93 |
| 36 | 72,73 | -1,11 | 1,24 |
| 37 | 86,36 | 12,52 | 156,84 |
| 38 | 61,36 | -12,48 | 155,66 |
| 39 | 88,64 | 14,80 | 218,93 |
| 40 | 90,91 | 17,07 | 291,35 |
| 41 | 68,18 | -5,66 | 32,02 |
| 42 | 70,45 | -3,39 | 11,46 |
| 43 | 59,09 | -14,75 | 217,54 |
| 44 | 63,64 | -10,20 | 104,11 |
| 45 | 61,36 | -12,48 | 155,66 |
| Total | 3.322,73 | 0 | 7.878,33 |

Table 4.3 Female students' test result in mastering degree of comparison of the eighth grade MTs Nipi Rakha Amuntai in academic year 2015/2016

| Subject Number | Multiple Choice | Score |
| :---: | :---: | :---: |
| 1 | 37 | 84,09 |
| 2 | 37 | 84,09 |
| 3 | 36 | 81,82 |
| 4 | 33 | 75,00 |
| 5 | 31 | 70,45 |
| 6 | 35 | 79,55 |
| 7 | 40 | 90,91 |
| 8 | 43 | 97,73 |
| 9 | 39 | 88,64 |
| 10 | 37 | 84,09 |
| 11 | 37 | 84,09 |
| 12 | 25 | 56,82 |
| 13 | 25 | 56,82 |
| 14 | 27 | 61,36 |
| 15 | 43 | 97,73 |
| 16 | 38 | 86,36 |
| 17 | 27 | 61,36 |
| 18 | 27 | 61,36 |

Table 4.3 (Continued)

| Subject Number | Multiple Choice | Score |
| :---: | :---: | :---: |
| 19 | 33 | 75,00 |
| 20 | 34 | 77,27 |
| 21 | 41 | 93,18 |
| 22 | 28 | 63,64 |
| 23 | 34 | 77,27 |
| 24 | 30 | 68,18 |
| 25 | 31 | 70,45 |
| 26 | 33 | 75,00 |
| 27 | 37 | 84,09 |
| 28 | 37 | 84,09 |
| 29 | 27 | 61,36 |
| 30 | 19 | 43,18 |
| 31 | 39 | 88,64 |
| 32 | 40 | 90,91 |
| 33 | 28 | 63,64 |
| 34 | 34 | 77,27 |
| 35 | 27 | 61,36 |
| 36 | 26 | 59,09 |
| 37 | 35 | 79,55 |

## Table 4.3 (Continued)

| Subject Number | Multiple Choice | Score |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 38 | 34 | 77,27 |  |  |
| 39 | 33 | 75,00 |  |  |
| 40 | 34 | 77,27 |  |  |
| 41 | 32 | 79,55 |  |  |
| 42 | 29 | 72,73 |  |  |
| 43 | 36 | 88,64 |  |  |
| 44 |  | 65,91 |  |  |
| 45 |  | 81,82 |  |  |
| Total |  | $3.413,64$ |  |  |
|  |  |  |  |  |

Based on the table above, it is found that the highest score of female students of the eighth grade MTs Nipi Rakha Amuntai is 97,73 , while the lowest score is 43,18 . Then, the accumulated score is $3.413,64$.

Then, to know female students' mastery in degree of comparison of the eighth grade MTs Nipi Rakha Amuntai, the writer uses the accounting of mean score as follow:
$\mathrm{M}_{2}=\frac{\sum ?}{?}$
$\mathrm{M}_{2}=\frac{\text { ?Ç?? ?? }}{? ?}$
$\mathrm{M}_{2}=75,86$

From the data above, it shows that the female students' mean score is 75,86 . So, the female students' mastery in degree of comparison of the eighth grade MTs Nipi Rakha Amuntai can be concluded in the good category.

Further, in order to count the t-test to answer the third question of the research, the writer counted the total value based on the mean which has been calculated above to know the Standard Deviation value of this group. The data about this is showed in the table below:

Table 4.4 Working table of data analysis of female students' mastery in degree of comparison of the eighth grade MTs Nipi Rakha Amuntai 2015/2016

| Subject Number | Nilai ? | $? A ?-? ?$ | $? ?$ |
| :---: | :---: | :---: | :---: |
| 1 | 84,09 | 8,23 | 68,08 |
| 2 | 84,09 | 8,23 | 68,08 |
| 3 | 81,82 | 5,96 | 35,74 |
| 4 | 75,00 | $-0,86$ | 0,71 |
| 5 | 70,45 | $-5,41$ | 2900 |
| 6 | 79,55 | 3,69 | 13,73 |
| 7 | 90,91 | 15,05 | 227,08 |
| 8 | 97,73 | 21,87 | 479,05 |
| 9 | 88,64 | 12,78 | 163,75 |
| 10 | 84,09 | 8,23 | 68,08 |
| 11 | 84,09 | 8,23 | 68,08 |
| 7 |  |  |  |

Table 4.4 (Continued)

| Subject Number | Nilai $A$ ? | ? A? - ? ? | ?? |
| :---: | :---: | :---: | :---: |
| 12 | 56,82 | -19,04 | 361,83 |
| 13 | 56,82 | -19,04 | 361,83 |
| 14 | 61,36 | -14,5 | 209,57 |
| 15 | 97,73 | 21,87 | 479,05 |
| 16 | 86,36 | 10,5 | 110,75 |
| 17 | 61,36 | -14,5 | 209,57 |
| 18 | 61,36 | -14,5 | 209,57 |
| 19 | 75,00 | -0,86 | 0,71 |
| 20 | 77,27 | 1,41 | 2,05 |
| 21 | 93,18 | 17,32 | 300,74 |
| 22 | 63,64 | -12,22 | 148,93 |
| 23 | 77,27 | 1,41 | 2,05 |
| 24 | 68,18 | -7,68 | 58,65 |
| 25 | 70,45 | -5,41 | 29,00 |
| 26 | 75,00 | -0,86 | 0,71 |
| 27 | 84,09 | 8,23 | 68,08 |
| 28 | 84,09 | 8,23 | 68,08 |
| 29 | 61,36 | -14,5 | 209,57 |
| 30 | 43,18 | -32,68 | 1066,56 |

Table 4.4 (Continued)

| Subject Number | Nilai $A$ ? | ? A? - ? | ? |
| :---: | :---: | :---: | :---: |
| 31 | 88,64 | 12,78 | 163,75 |
| 32 | 90,91 | 15,05 | 227,08 |
| 33 | 63,64 | -12,22 | 148,93 |
| 34 | 77,27 | 1,41 | 2,05 |
| 35 | 61,36 | -14,5 | 209,57 |
| 36 | 59,09 | -16,77 | 280,53 |
| 37 | 79,55 | 3,69 | 13,73 |
| 38 | 77,27 | 1,41 | 2,05 |
| 39 | 75,00 | -0,86 | 0,71 |
| 40 | 77,27 | 1,41 | 2,05 |
| 41 | 79,55 | 3,69 | 13,73 |
| 42 | 72,73 | -3,13 | 9,69 |
| 43 | 88,64 | 12,78 | 163,75 |
| 44 | 65,91 | -9,95 | 98,62 |
| 45 | 81,82 | 5,96 | 35,74 |
| Total | 3.413,64 | 0 | 6.490,60 |

## 2. Data Analysis

To know the comparative study between male and female students in mastering degree of comparison, the writer uses "t-test". After all the collected data have been processed, the writer analyzes them and makes conclusion by using the " $t$-test" formula:

1. Based on the result of the test in appendix, the writer calculates the mean formula of male and female students. To keep the subject identity, the writer just uses number for identifying the subject.
$\mathrm{M}_{1}=\frac{\sum ?}{?}=\frac{? \text { Ç?? ?? }}{? ?}=73,84$
$\mathrm{M}_{2}=\frac{\sum ?}{?}=\frac{? \text { ? } ? \text { ? ? ?? }}{? ?}=75,86$
2. The writer counts standard deviation of male and female students by using formula:
$S D_{1}=? \overline{\overline{\sum ? \hat{e}}}\left(\right.$ ? ? ?) $=? \overline{\frac{?(? ? ? ? ?}{(? ? ?)}}=? \overline{\mathrm{E} \quad \overline{\mathrm{E}} \quad 13,38}$
$S D_{2}=? \overline{\overline{\sum ? \hat{\mathrm{e}}}} \overline{(? ?)}=? \overline{\frac{?(? ? ? ? ?}{}} \frac{(? ? ?)}{(?)}=? \overline{\mathrm{E}} \quad \overline{\mathrm{E} \mathrm{E}}=12,15$
3. The writer counts standard error of mean from male and female students by using formula:

$$
\begin{aligned}
\mathrm{SE}_{m l} & =\frac{\mathrm{SD}}{? \mathrm{~N}-1} \\
& =\frac{13 \hat{\mathrm{E}}}{? 45-1}=\frac{? ? ? ?}{\sqrt{? ?}} \quad \frac{? ? ? ?}{\mathrm{E}}=2,02
\end{aligned}
$$

$$
\begin{aligned}
\mathrm{SE}_{m 2} & =\frac{\mathrm{SD}}{? \mathrm{~N}-1} \\
& =\frac{12,15}{? 45-1}=\frac{? ? ? ?}{\sqrt{? ?}} \quad \frac{? ? ? ?}{\hat{\mathrm{E}}} \quad 1,83
\end{aligned}
$$

4. The writer counts standard error from both subjects by using:

$$
\begin{aligned}
\mathrm{SE}_{\mathrm{M} 1-\mathrm{M} 2}=\sqrt{\mathrm{SE} \mathrm{M}_{1}^{2} \quad \mathrm{SE} \mathrm{M}_{1}{ }^{2}} & =? \overline{2,02^{2} \quad 1,8 \hat{\mathrm{E}}^{2}} \\
& =? \overline{(\quad) \hat{\mathrm{E} \hat{\mathrm{EE}}}} \\
& =\sqrt{\hat{\mathrm{E}}} \\
& =2,73
\end{aligned}
$$

5. The writer counts $t$-test by using formula:
t-test $\quad \frac{? ? ? ? ?}{? ? ? ? ? ?} \quad \frac{? ? ? ? ? ? ? ?}{? ? ?}=\frac{? ? ? ?}{? ? ?}=-0,74$
6. Giving interpretation for " $t$ " with consulting $t$ table;

- Looking for Degree of Freedom

$$
\begin{aligned}
\mathrm{df} / \mathrm{db} & =(\mathrm{N} 1+\mathrm{N} 2)-2 \\
& =(45+45)-2 \\
& =90-2 \\
& =88
\end{aligned}
$$

- Consulting score of "db/df" with "t table"
- In significant degrees t table $5 \%=1,99$
- In significant degrees $t$ table $1 \%=2,63$

Henry E. Garret in Anas Sudijono (1987, p.405)

After the writer finds the df (degree of freedom), which is 88 , the writer uses nearest df in the table, that is df at 90 . The table is put in appendix.
7. The writer makes conclusion

Thus, based on the explanation of the formulas above, it is clearly seen that $\mathbf{t}$ count $(-0,74)<\mathrm{t}$ table $5 \%(1,99)<\mathrm{t}$ table $1 \%(2,6)$. T table is higher than $t$ count. Ho (Zero Hypothesis) is accepted and Ha (Alternative Hyphothesis) is rejected. By this result, the writer concludes that Ho is accepted.

From the research, it is found that there is no difference in mastering degree of comparison between male and female students of the eighth grade MTs Nipa and Nipi Rakha Amuntai in the academic year 2015/2016.

## B. Discussion

From the statistical measurement above shows that Ho (Zero Hypothesis) is accepted; Ha (Alternative Hypothesis) is rejected, because value of t-count is lower than t-table (value of critic "t"). It means "there is no significance different" in mastering degree of comparison between male and female students of the eighth grade MTs Nipa and Nipi Rakha Amuntai in the academic year 2015/2016.

Based on the result of the test, there are different highest and lowest scores of the test. The highest score of the test result of male students is 93,18 whereas
the highest score of female students is 97,73 . While the lowest score of the male students is 59,09 and the lowest score of female students is 43,18 . Based on the data above, it can be seen that the highest score of this test was got by the female students which is 97,73 . However, the lowest score of this test was also got by the female student which is 43,18 .

According to the data, the writer also found that the mean score of both is rather same. One hand, the mean score of male students is 73,84 . It means male students' mastery in degree of comparison of the eighth grade MTs Nipa is in good category. Meanwhile, the mean score female students is 75,86 which indicates that female students' mastery in degree of comparison of the eighth grade MTs Nipi is also in good category. Thus, both of them are classified in good category.

Although there are different score and mean score, but by collecting numerical data that are analyzed using mathematically. The writer found the result of the test from the subjects or t -count is lower than t -table. Thus, it can be stated that there is no significance different in mastering degree of comparison between male and female students of the eighth grade MTs Nipa and Nipi Rakha Amuntai in the academic year 2015/2016.

Based on data and explanation above, the writer infers that the mastery of male and female students in learning grammar is not affected by the different neurocognitive brain processes. Even though there are different in the ways of male students and female students in learning grammar which are stated by

Ullman in Thompson (2006) where male students use their procedural memory while female students use their declarative memory, however, the ability of each student cannot be differentiated by looking at the ways to learn grammar.

