## CHAPTER IV

## DATA PRESENTATION AND DATA ANALYSIS

## A. The Description of the Data

The data described were based on the research that had been conducted at Islamic Senior High School 2 Bengkalis. This chapter describes the data of the comparison of vocabulary mastery in descriptive text between male and female students. Two variables were involved in this research; the first was students' gender (male and female) symbolized by "X", and the second was the students' vocabulary mastery in descriptive text symbolized by "Y". Students' vocabulary mastery in descriptive text as the dependent variable was investigated by using test. 28 items of multiple choice questions were used to measure the students' vocabulary mastery in descriptive text.

## B. The Data Presentation

## 1. Male Students' Vocabulary Mastery in Descriptive Text

In acquiring the data of male students' vocabulary mastery, the researcher took from the result of the students' test. It can be seen in the following table.

Table. IV. 1
The Score Recapitulation of Male Students' Vocabulary Mastery in Descriptive Text

| No. | Students | Noun | Verb | Adjective | Adverb | Score | Inverted <br> Score |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Student 1 | 1 | 3 | 3 | 3 | 10 | 36 |
| 2 | Student 2 | 1 | 3 | 3 | 1 | 8 | 29 |
| 3 | Student 3 | 2 | 4 | 2 | 1 | 9 | 32 |
| 4 | Student 4 | 4 | 4 | 7 | 4 | 19 | 68 |
| 5 | Student 5 | 5 | 4 | 6 | 4 | 19 | 68 |
| 6 | Student 6 | 2 | 3 | 2 | 2 | 9 | 32 |
| 7 | Student 7 | 4 | 4 | 4 | 4 | 16 | 57 |
| 8 | Student 8 | 3 | 0 | 1 | 2 | 6 | 21 |
| 9 | Student 9 | 1 | 3 | 4 | 2 | 10 | 36 |
| 10 | Student 10 | 2 | 3 | 2 | 2 | 9 | 32 |
| 11 | Student 11 | 2 | 3 | 2 | 2 | 9 | 32 |
| 12 | Student 12 | 3 | 4 | 7 | 4 | 18 | 64 |
| 13 | Student 13 | 4 | 4 | 6 | 5 | 19 | 68 |
| 14 | Student 14 | 3 | 5 | 5 | 3 | 16 | 57 |
| 15 | Student 15 | 2 | 4 | 5 | 2 | 13 | 46 |
| 16 | Student 16 | 1 | 2 | 6 | 2 | 11 | 39 |
| 17 | Student 17 | 5 | 4 | 6 | 4 | 19 | 68 |
| 18 | Student 18 | 4 | 2 | 3 | 3 | 12 | 43 |
| 19 | Student 19 | 4 | 4 | 5 | 3 | 16 | 57 |
| 20 | Student 20 | 4 | 3 | 4 | 3 | 14 | 50 |
| 21 | Student 21 | 5 | 4 | 6 | 4 | 19 | 68 |
| 22 | Student 22 | 1 | 4 | 2 | 2 | 9 | 32 |
|  | Total |  |  |  |  |  | $\mathbf{1 0 3 6}$ |
|  | Mean |  |  |  |  |  | 47 |

From the table IV. 1 above, there were 22 respondents. The calculation of total test of students score was 1036. The mean of students' test score was 47 . The frequency distribution of male students' vocabulary mastery in descriptive text score was obtained by using SPSS 23 as follows:

Table IV. 2

## Descriptive Statistics of Male Students' Vocabulary Mastery in Descriptive Text

|  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Valid | 21.00 | 1 | 4.5 | 4.5 | 4.5 |
|  | 29.00 | 1 | 4.5 | 4.5 | 9.1 |
|  | 32.00 | 5 | 22.7 | 22.7 | 31.8 |
|  | 36.00 | 2 | 9.1 | 9.1 | 40.9 |
|  | 39.00 | 1 | 4.5 | 4.5 | 45.5 |
|  | 43.00 | 1 | 4.5 | 4.5 | 50.0 |
|  | 46.00 | 1 | 4.5 | 4.5 | 54.5 |
|  | 50.00 | 1 | 4.5 | 4.5 | 59.1 |
|  | 57.00 | 3 | 13.6 | 13.6 | 72.7 |
|  | 64.00 | 1 | 4.5 | 4.5 | 77.3 |
|  | 68.00 | 5 | 22.7 | 22.7 | 100.0 |
|  | Total | 22 | 100.0 | 100.0 |  |

Based on the table IV. 2 above, it can be seen the frequency interval of 21 was 1 student ( $4.5 \%$ ), the frequency interval of 29 was 1 student (4.5\%), the frequency interval of 32 was 5 students (22.7\%), the frequency interval of 33 was 2 students ( $9.1 \%$ ), the frequency interval of 39 was 1 student ( $4.5 \%$ ), the frequency interval of 43 was 1 student (4.5\%), the frequency interval of 46 was 1 student (4.5\%), the frequency interval of 50 was 1 student (4.5\%), the frequency interval of 57 was 3 students (13.6\%), the frequency interval of 64 was 1 student ( $4.5 \%$ ), and the frequency interval of 68 was 5 students ( $22.7 \%$ ).

## 2. Female Students' Vocabulary Mastery in Descriptive Text

In getting the data of female students' vocabulary mastery, the researcher took from the result of the students' test. It can be seen in the following table:

Table IV. 3
The Score Recapitulation of Female Students' Vocabulary Mastery in Descriptive Text

| No. | Students | Noun | Verb | Adjective | Adverb | Score | Inverted <br> Score |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Student 1 | 3 | 5 | 5 | 3 | 16 | 57 |
| 2 | Student 2 | 4 | 2 | 4 | 3 | 13 | 46 |
| 3 | Student 3 | 3 | 3 | 4 | 5 | 15 | 54 |
| 4 | Student 4 | 3 | 5 | 5 | 2 | 15 | 54 |
| 5 | Student 5 | 5 | 5 | 6 | 3 | 19 | 68 |
| 6 | Student 6 | 4 | 5 | 4 | 2 | 15 | 54 |
| 7 | Student 7 | 3 | 4 | 6 | 3 | 16 | 57 |
| 8 | Student 8 | 4 | 5 | 6 | 4 | 19 | 68 |
| 9 | Student 9 | 4 | 4 | 6 | 3 | 17 | 61 |
| 10 | Student 10 | 4 | 5 | 4 | 4 | 17 | 61 |
| 11 | Student 11 | 1 | 1 | 6 | 2 | 10 | 36 |
| 12 | Student 12 | 3 | 6 | 5 | 2 | 16 | 57 |
| 13 | Student 13 | 4 | 3 | 5 | 0 | 12 | 43 |
| 14 | Student 14 | 5 | 5 | 7 | 4 | 21 | 75 |
| 15 | Student 15 | 4 | 5 | 4 | 4 | 17 | 61 |
| 16 | Student 16 | 4 | 3 | 2 | 2 | 11 | 39 |
| 17 | Student 17 | 4 | 4 | 7 | 4 | 19 | 68 |
| 18 | Student 18 | 4 | 4 | 7 | 4 | 19 | 68 |
| 19 | Student 19 | 4 | 4 | 7 | 4 | 19 | 68 |
| 20 | Student 20 | 4 | 4 | 7 | 5 | 20 | 71 |
| 21 | Student 21 | 4 | 4 | 7 | 4 | 19 | 68 |
| 22 | Student 22 | 1 | 2 | 3 | 3 | 9 | 32 |
|  | Total |  |  |  |  |  | $\mathbf{1 2 6 4}$ |
|  | Mean |  |  |  |  | $\mathbf{5 7}$ |  |

From the table IV. 3 above, there were 22 respondents. The calculation of total test of students score was 1246 . The mean of students' test score was 57. The frequency distribution of female students' vocabulary mastery in descriptive text score was obtained by using SPSS 23 as follows:

Table IV. 4
Descriptive Statistics of Female Students' Vocabulary Mastery in Descriptive Text

|  |  | Frequency | Percent | Valid <br> Percent | Cumulative Percent |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Valid | 32.00 | 1 | 4.5 | 4.5 | 4.5 |
|  | 36.00 | 1 | 4.5 | 4.5 | 9.1 |
|  | 39.00 | 1 | 4.5 | 4.5 | 13.6 |
|  | 43.00 | 1 | 4.5 | 4.5 | 18.2 |
|  | 46.00 | 1 | 4.5 | 4.5 | 22.7 |
|  | 54.00 | 3 | 13.6 | 13.6 | 36.4 |
|  | 57.00 | 3 | 13.6 | 13.6 | 50.0 |
|  | 61.00 | 3 | 13.6 | 13.6 | 63.6 |
|  | 68.00 | 6 | 27.3 | 27.3 | 90.9 |
|  | 71.00 | 1 | 4.5 | 4.5 | 95.5 |
|  | 75.00 | 1 | 4.5 | 4.5 | 100.0 |
|  | Total | 22 | 100.0 | 100.0 |  |

Based on the table IV. 4 above, it can be seen the frequency interval of 32 was 1 student ( $4.5 \%$ ), the frequency interval of 36 was 1 student (4.5\%), the frequency interval of 39 was 1 student (4.5\%), the frequency interval of 43 was 1 student ( $4.5 \%$ ), the frequency interval of 46 was 1 student (4.5\%), the frequency interval of 54 was 3 students ( $13.6 \%$ ), the frequency interval of 57 was 3 students (13.6\%), the frequency interval of 61 was 3 students ( $13.6 \%$ ), the frequency interval of 68 was 6 students ( $27.3 \%$ ), the frequency interval of 71 was 1 student ( $4.5 \%$ ), and frequency interval of 75 was 1 student (4.5\%).

## 3. Difference between Male and Female Students' Vocabulary Mastery

 in Descriptive TextThe data presentation of the comparison between male and female students' vocabulary mastery can be seen as follows:

Table IV. 5
The Comparison Score between Male and Female Students' Vocabulary Mastery in Descriptive Text

| No | Male |  | Female |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Student | Score | Student | Score |
| 1 | Student 1 | 36 | Student 1 | 57 |
| 2 | Student 2 | 29 | Student 2 | 46 |
| 3 | Student 3 | 32 | Student 3 | 54 |
| 4 | Student 4 | 68 | Student 4 | 54 |
| 5 | Student 5 | 68 | Student 5 | 68 |
| 6 | Student 6 | 32 | Student 6 | 54 |
| 7 | Student 7 | 57 | Student 7 | 57 |
| 8 | Student 8 | 21 | Student 8 | 68 |
| 9 | Student 9 | 36 | Student 9 | 61 |
| 10 | Student 10 | 32 | Student 10 | 61 |
| 11 | Student 11 | 32 | Student 11 | 36 |
| 12 | Student 12 | 64 | Student 12 | 57 |
| 13 | Student 13 | 68 | Student 13 | 43 |
| 14 | Student 14 | 57 | Student 14 | 75 |
| 15 | Student 15 | 46 | Student 15 | 61 |
| 16 | Student 16 | 39 | Student 16 | 39 |
| 17 | Student 17 | 68 | Student 17 | 68 |
| 18 | Student 18 | 43 | Student 18 | 68 |
| 19 | Student 19 | 57 | Student 19 | 68 |
| 20 | Student 20 | 50 | Student 20 | 71 |
| 21 | Student 21 | 68 | Student 21 | 68 |
| 22 | Student 22 | 32 | Student 22 | 32 |
|  | Total | $\mathbf{1 0 3 6}$ |  | $\mathbf{1 2 4 6}$ |
|  | Mean | $\mathbf{4 7}$ |  | $\mathbf{5 7}$ |

From the table above, there were 22 students of both gander. The total score of male students was 1036 and the total score of female students was 1246 . The mean score of male students was 47 and the mean score of female students was 57.

## C. The Normality of the Data

Before analyzing the data by using independent sample $t$-test, it is necessary to test the normality of the data. In analyzing the normality of the
data, the researcher used Kolmogorov Smirnov formula calculated by using SPSS. The result of the normality data is as follows:

Table IV. 6 Test of Normality

|  | Kolmogorov-Smirnov $^{\mathrm{a}}$ |  |  |  | Shapiro-Wilk |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :---: | :---: |
|  | Statistic | Df | Sig. | Statistic | Df | Sig. |  |  |
| Male <br> Students | .167 | 22 | .114 | .885 | 22 | .015 |  |  |
| Female <br> Students | .172 | 22 | .090 | .921 | 22 | .078 |  |  |

Based on the data above, can be seen that the sig. value of male students was 0.114 and the female was 0.090 . It can be stated that $0.114>0.05$ and $0.090>0.05$ which means that both of the data were normally distributed.

## D. The Data Analysis

## 1. Male Students' Vocabulary Mastery in Descriptive Text

The data analysis of male students' vocabulary mastery is explained in the following table:

Table IV. 7
Descriptive Statistics of Male Students' Vocabulary Mastery

| $\mathbf{N}$ | Valid | 22 |
| :--- | :--- | ---: |
|  | Missing | 0 |
| Mean | 47.0455 |  |
| Median | 44.5000 |  |
| Std. Deviation | 15.81283 |  |
| Variance | 250.045 |  |
| Minimum | 21.00 |  |
| Maximum | 68.00 |  |
| Sum | 1036 |  |

Table above explained the minimum score for vocabulary mastery in descriptive text of male students was 21 and the maximum score was 68. The total score was 1036 , the standard deviation was 15.81 and the mean score was 47 . From the means score, it can be concluded that the vocabulary mastery in descriptive text of male students was categorized into less category based on the scale of vocabulary mastery.

Table IV. 8
Descriptive Statistics of Indicators of Male Students' Vocabulary Mastery

|  |  | Noun | Verb | Adjective | Adverb |
| :--- | :--- | ---: | ---: | ---: | ---: |
| N | Valid | 22 | 22 | 22 | 22 |
|  | Missing | 0 | 0 | 0 | 0 |
| Mean | 2,86 | 3,36 | 4,14 | 2,82 |  |
| Median | 3,00 | 4,00 | 4,00 | 3,00 |  |
| Std. Deviation | 1,424 | 1,049 | 1,859 | 1,097 |  |
| Variance | 2,028 | 1,100 | 3,457 | 1,203 |  |
| Minimum | 1 | 0 | 1 | 1 |  |
| Maximum | 5 | 5 | 7 | 5 |  |
| Sum | 63 | 74 | 91 | 62 |  |

From the table above, we can concluded that the mean score for noun was 3,59 , the median was 3,00 , standard deviation was 1,424 , variance was 2,028 , the minimum score was 1 , the maximum score was 5 , sum was 63 . The mean score for verb was 3,36 , the median was 4,00 , standard deviation was 1,049 , variance was 1,100 , the minimum score was 0 , the maximum score was 5 , sum was 74 . The mean score for adjective was 4,14 , the median was 4,00 , standard deviation was 1,850 , variance was 3,457 , the minimum score was 1 , the maximum score was 7 , sum was 91. The mean score for adverb was 2,82 , the median was 3,00 , standard
deviation was 1,097 , variance was 1,203 , the minimum score was 1 , the maximum score was 5 , sum was 62 .

## 2. Female Students' Vocabulary Mastery in Descriptive Text

The data analysis of female students' vocabulary mastery is explained in the following table:

Table IV. 9
Descriptive Statistics of Female Students'
Vocabulary Mastery

| N | Valid | 22 |
| :--- | :--- | ---: |
|  | Missing | 0 |
| Mean | 57.5455 |  |
| Median | 59.0000 |  |
| Std. Deviation | 11.99495 |  |
| Variance | 143.879 |  |
| Minimum | 32.00 |  |
| Maximum | 75.00 |  |
| Sum | 1246.00 |  |

Table above explained the minimum score for vocabulary mastery in descriptive text of male students was 32 and the maximum score was 75. The total score was 1246 , the standard deviation was 11.99 and the mean score was 57 . From the means score, it can be concluded that the vocabulary mastery in descriptive text of female students was categorized into enough category based on the scale of vocabulary mastery.

Table IV. 10
Descriptive Statistics of Indicators of Female Students' Vocabulary Mastery

|  |  | Noun | Verb | Adjective | Adverb |
| :--- | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{N}$ | Valid | 22 | 22 | 22 | 22 |
|  | Missing | 0 | 0 | 0 | 0 |
| Mean | 3,59 | 4,00 | 5,32 | 3,18 |  |
| Median | 4,00 | 4,00 | 5,50 | 3,00 |  |
| Std. Deviation | 1,008 | 1,234 | 1,460 | 1,181 |  |
| Variance | 1,015 | 1,524 | 2,132 | 1,394 |  |
| Minimum | 1 | 1 | 2 | 0 |  |
| Maximum | 5 | 6 | 7 | 5 |  |
| Sum | 79 | 88 | 117 | 70 |  |

From the table above, we can concluded that the mean score for noun was 3,59 , the median was 4,00 , standard deviation was 1,008 , variance was 1,015 , the minimum score was 1 , the maximum score was 5 , sum was 79 . The mean score for verb was 4,00 , the median was 4,00 , standard deviation was 1,234 , variance was 1,524 , the minimum score was 1 , the maximum score was 6 , sum was 88 . The mean score for adjective was 5,32 , the median was 5,50 , standard deviation was 1,460 , variance was 2.132 , the minimum score was 2 , the maximum score was 7 , sum was 117. The mean score for adverb was 3,18 , the median was 3,00 , standard deviation was 1,181 , variance was 1,394 , the minimum score was 0 , the maximum score was 5 , sum was 70 .

## 3. Difference between Male and Female Students' Vocabulary Mastery in Descriptive Text

Before investigating the difference of male and female students' vocabulary mastery in descriptive text at Islamic Senior High School 2 Bengkalis, the researcher calculated the mean, standard deviation and
standard error mean score of Male and Female students by using SPSS, can be seen in the following table:

Table IV. 11
Group Statistics

|  | Group | N | Mean | Std. Deviation | Std. Error Mean |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Score | Male Students | 22 | 47.0455 | 15.81283 | 3.37131 |
|  | Female Students | 22 | 57.5455 | 11.99495 | 2.55733 |

Based on the table above, the total number of students for male students consisted of 22 students and female students consisted of 22 students. The mean score of male students was 47 and the mean score of female students was 57 and the standard deviation of male students was 15.81, while standard deviation of female students was 57.54 , the std. error of mean of male students was 3.37 , while the std. error of mean of female students was 2.55. The second table determines the result of the independent sample test analysis. The table is as follows:

Table IV. 12
Independent Samples Test

|  |  | Levene for Equa Varia | Test ity of ces |  |  |  | est for Equa | y of Means |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  | 95\% Confide of the Di | Interval erence |
|  |  | F | Sig. | t | Df | $\begin{gathered} \text { Sig. } \\ (2- \\ \text { (ailed) } \end{gathered}$ | Mean Difference | Std. Error Difference | Lower | Upper |
| Score | Equal variances assumed | 4.969 | . 031 | -2.481 | 42 | . 017 | -10.50000 | 4.23151 | -19.03953 | -1.96047 |
|  | Equal <br> variances <br> not <br> assumed |  |  | $-2.481$ | 39.156 | $.017$ | -10.50000 | 4.23151 | -19.05794 | -1.94206 |

Based on the output SPSS above, independent-sample T-Test shows Levene's Test to know the same variance. The testing criteria and hypotheses are below:

If Probabilities $>0.05$, Ho is accepted
If Probabilities $<0.05$, Ha is accepted
Ho: Variance Population identical
Ha: Variance Population not identical
It can be seen that the sig. value of Levene's Test is 0.031 . It can be stated that $0.031<0.05$. It means that Ha is accepted, so the variance of the population is not identical. Then, to know whether there is or not the statistically difference, independent sample T-Test shows the t -test for Equality of means. The testing criteria and hypotheses are below:

If Probabilities $>0.05$, Ho is accepted
If Probabilities < 0.05, Ha is accepted
Ho: There is no statistically difference
Ha: There is statistically difference
From the output above, it can be seen that the sig. value is 0.017 . It can be stated that $0.017<0.05$. It means that null hypothesis $\left(\mathrm{H}_{\mathrm{o}}\right)$ is rejected, while the alternative hypothesis $\left(\mathrm{H}_{\mathrm{a}}\right)$ is accepted. So, it can be concluded that there is a significant difference between male students and female students on vocabulary mastery in descriptive text at the tenth grade of Islamic Senior High School 2 Bengkalis.

