## CHAPTER IV

## RESEARCH FINDINGS AND DISCUSSION

This chapter covers about research findings and discussion that include the description of data, hypothesis testing, and discussion.

## A. The Description of Data

In this chapter, the researcher presented the data on the students' vocabulary acquisition between students who were taught by using Semantic Feature Analysis and who were taught without using Semantic Feature Analysis. The subject of this research consisted of two classes, they were VIII B as experimental class and VIII A as control class. The purpose of this research was to know the effectiveness of Semantic Feature Analysis on students' vocabulary acquisition of second grade at MTs Darul Huda. The data were collected from students' score in pre-test and post-test of both classes.

The scores are divided into five criteria. They are excellent, very good, good, low, and failed. First, the students will be categorized into excellent score if they got $85-100$ score. Second, the students will be categorized into very good score if they got 71-84 score. Third, the students will be categorized into good score if they got $60-70$ score. Fourth, the students will be categorized into poor score if they got 40-59
score. Last, the students will be categorized into failed score if they got 0 39 score.

## 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. | $40-59$ | Poor |
| 5. | $0-39$ | Failed |

## 1. The Students' Score in Experimental Class

a. Pre-test of Experimental Class

The pre-test was done on February, $27^{\text {th }}$ 2019. Experimental class is class which got treatment by using Semantic Feature Analysis. The subject of this study consisted of 30 students at eight B class. According to the result of pre-test in table 4.2, it showed that the sum of data was 2040 . The lowest score was 45 , the highest score was 90 , the mean of students' score in pre-test was 68 , the mode was 65 , and the median was 67.50 .

Table 4.2: Descriptive Statistic Pre-Test of Experimental Class

## Statistics

Pretest

| N $\quad$ Valid | 30 |
| :--- | :--- |
| Missing | 0 |
| Mean | 68.00 |
| Median | 67.50 |
| Mode | 65 |
| Std. Deviation | 9.879 |
| Minimum | 45 |
| Maximum | 90 |
| Sum | 2040 |

Table 4.3: The Frequency of Students' Vocabulary Acquisition before being taught by using Semantic Feature Analysis

Pretest

|  |  | Frequency | Percent | Valid <br> Percent | Cumulative <br> Percent |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Valid | 45 | 1 | 3.3 | 3.3 | 3.3 |
|  | 55 | 3 | 10.0 | 10.0 | 13.3 |
|  | 60 | 4 | 13.3 | 13.3 | 26.7 |
|  | 65 | 7 | 23.3 | 23.3 | 50.0 |
|  | 70 | 6 | 20.0 | 20.0 | 70.0 |
|  | 75 | 5 | 16.7 | 16.7 | 86.7 |
|  | 80 | 1 | 3.3 | 3.3 | 90.0 |
|  | 85 | 2 | 6.7 | 6.7 | 96.7 |
|  | 90 | 1 | 3.3 | 3.3 | 100.0 |
|  | Total | 30 | 100.0 | 100.0 |  |

From the table 4.3, the frequency of pre-test after being distributed, there were not students who got failed score. There were 4 students who got score between 40-59 means that students' vocabulary acquisition is poor, there were 17 students who got score between 60-70 means that students' vocabulary acquisition is good, there were 6 students who got score between 71-84 means that students' vocabulary acquisition is very good, and there were 3 students who got score between 85-100 means that students' vocabulary acquisition is excellent.

## b. The Students' Score in Post-test

The post-test was done on March, $22^{\text {nd }} 2019$. The subject of post-test consisted of 30 students at eight B class. According to the result of post-test in table 4.4, it showed that the sum of data was 2330. The lowest score of post-test was 55, the highest score was 95 , the mean was 77.67 , the mode was 80 , and the median was 80 .

Table 4.4: Descriptive Statistic Post-Test of Experimental Class

## Statistics

Posttest

| N $\quad$ Valid | 30 |
| :--- | ---: |
| Missing | 0 |
| Mean | 77.67 |
| Median | 80.00 |
| Mode | 80 |
| Std. Deviation | 10.965 |
| Minimum | 55 |
| Maximum | 95 |
| Sum | 2330 |

Table 4.5: The Frequency of Students' Vocabulary Acquisition after being taught by using Semantic Feature Analysis

Posttest

|  |  | Frequency | Percent | Valid <br> Percent | Cumulative Percent |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Valid | 55 | 1 | 3.3 | 3.3 | 3.3 |
|  | 60 | 3 | 10.0 | 10.0 | 13.3 |
|  | 65 | 3 | 10.0 | 10.0 | 23.3 |
|  | 70 | 1 | 3.3 | 3.3 | 26.7 |
|  | 75 | 4 | 13.3 | 13.3 | 40.0 |
|  | 80 | 7 | 23.3 | 23.3 | 63.3 |
|  | 85 | 7 | 23.3 | 23.3 | 86.7 |
|  | 90 | 1 | 3.3 | 3.3 | 90.0 |
|  | 95 | 3 | 10.0 | 10.0 | 100.0 |
|  | Total | 30 | 100.0 | 100.0 |  |

From the table 4.5, the frequency of post-test after being distributed, there were not students who got failed score. There was 1 student who got score between 40-59 means that students' vocabulary acquisition is poor, there were 7 students who got score between 60-70 means that students' vocabulary acquisition is good, there were 11 students who got score between 71-84 means that students' vocabulary acquisition is very good, and there were 11 students who got score between 85-100 means that students' vocabulary acquisition is excellent.

## 2. The Students' Score in Control Class

a. Pre-test of Control Class

Pre-test in control class was done on February, $25^{\text {th }} 2019$. Pre-test class is a class which was taught by using conventional method in learning process. The subject was eight A class which consisted of 33 students. According to the result of pre-test in table 4.6, it showed that the sum of data was 1790 . The lowest score of pre-test was 35 , the highest score was 75 , the mean was 54.24 , the median was 55 , and the mode was 45 .

Table 4.6: Descriptive Statistic Pre-Test of Control Class

## Statistics

Pretest

| N $\quad$ Valid | 33 |
| :--- | :--- |
| Missing | 0 |
| Mean | 54.24 |
| Median | 55.00 |
| Mode | 45 |
| Std. Deviation | 11.734 |
| Minimum | 35 |
| Maximum | 75 |
| Sum | 1790 |

Table 4.7: The Frequency of Students' Pre-test in Control Class

Pretest

|  |  |  | Valid <br> Prequency | Cumulative <br> Percent |
| :---: | ---: | ---: | ---: | ---: |
| Valid 35 | 2 | 6.1 | 6.1 | 6.1 |
| 40 | 4 | 12.1 | 12.1 | 18.2 |
| 45 | 6 | 18.2 | 18.2 | 36.4 |
| 50 | 3 | 9.1 | 9.1 | 45.5 |
| 55 | 5 | 15.2 | 15.2 | 60.6 |
| 60 | 3 | 9.1 | 9.1 | 69.7 |
| 65 | 5 | 15.2 | 15.2 | 84.8 |
| 70 | 3 | 9.1 | 9.1 | 93.9 |
| 75 | 2 | 6.1 | 6.1 | 100.0 |
| Total | 33 | 100.0 | 100.0 |  |

From the table 4.7, the frequency of pre-test after being distributed, there were 2 students who got score between 0-39 means that students'
vocabulary acquisition is failed. There were 18 students who got score between 40-59 means that students' vocabulary acquisition is poor, there were 11 students who got score between 60-70 means that students' vocabulary acquisition is good, there were 2 students who got score between 71-84 means that students' vocabulary acquisition is very good, and there were not students who got excellent score.
b. Post-test in Control Class

Post-test was done on March, $18^{\text {th }}$ 2019. The subject was eight A class which consisted of 33 students. According to the result of post-test in table 4.8, it showed that the sum of data was 2020. The lowest score of post-test was 40 , the highest score was 85 , the mean was 61.21 , the mode was 65 , and the median was 60 .

## Table 4.8: Descriptive Statistic Post-Test of Control Class

## Statistics

Posttest

| N $\quad$ Valid | 33 |
| :--- | :--- |
| Missing | 0 |
| Mean | 61.21 |
| Median | 60.00 |
| Mode | 65 |
| Std. Deviation | 12.502 |
| Minimum | 40 |
| Maximum | 85 |
| Sum | 2020 |

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

Posttest

|  |  | Frequency | Percent | Valid <br> Percent |
| :---: | ---: | ---: | ---: | ---: |
| Valid | Cumulative <br> Percent |  |  |  |
| 45 | 3 | 9.1 | 9.1 | 9.1 |
| 50 | 3 | 9.1 | 9.1 | 18.2 |
| 55 | 2 | 6.1 | 6.1 | 24.2 |
| 60 | 4 | 12.1 | 12.1 | 36.4 |
| 65 | 5 | 15.2 | 15.2 | 51.5 |
| 70 | 7 | 21.2 | 21.2 | 72.7 |
| 75 | 2 | 6.1 | 6.1 | 78.8 |
| 80 | 3 | 9.1 | 9.1 | 87.9 |
| 85 | 3 | 9.1 | 9.1 | 97.0 |
| Total | 1 | 3.0 | 3.0 | 100.0 |
|  | 33 | 100.0 | 100.0 |  |

From the table 4.9, the frequency of post-test after being distributed, there were not students who got failed score. There were 12 students who got score between 40-59 means that students' vocabulary acquisition is poor, there were 14 students who got score between 60-70 means that students' vocabulary acquisition is good, there were 6 students who got score between 71-84 means that students' vocabulary acquisition is very good, and there was 1 student who got score between 85-100 means that students' vocabulary acquisition is excellent.
3. The difference of statistical data in post-test of control and experimental class

Here, the researcher compared the students' score of post-test. The result of statistical calculation will be shown as follows:

Table 4.10: Descriptive Statistic of Control and Experimental Class

## Statistics

|  |  | Experimental | Control |
| :--- | :--- | :---: | :---: |
| N | Valid | 30 | 33 |
|  | Missing | 0 | 0 |
|  |  | 77.67 | 61.21 |
| Mean | 80 | 60 |  |
| Median | 80 | 65 |  |
| Mode | 55 | 40 |  |
| Minimum | 95 | 85 |  |
| Maximum |  |  |  |

Based on the table above, it can be seen the differences students' score of control class and experimental class. In control class, the mean score was 61.21 , the median was 60 , the mode was 65 , the lowest score was 40 , and the highest score was 85 . While in experimental class, the mean score was 77.67 , the median was 80 , the mode was 80 , the lowest score was 55 , and the highest score was 95 .

The result showed that the experimental class or the class who got treatment by using Semantic Feature Analysis was higher than the class without treatment. Thus, there were significance difference of the students' score in the test between group who got treatment and the other one without treatment. In other words, the use of Semantic Feature

Analysis is effective on students' vocabulary acqusition at second grade students of MTs Darul Huda.

In this research, the researcher used SPSS 16.0 to know the effectiveness of Semantic Feature Analysis on students' vocabulary acqusition at second grade of MTs Darul Huda. The result would be shown as follows:

Table 4.11: Descriptive Statistic of Post-Test (Experimental Class and Control Class)

Group Statistics

| Class | $\mathbf{N}$ | Mean | Std. <br> Deviation | Std. Error <br> Mean |
| :---: | :---: | :---: | :---: | :---: |
| Value experimental | 30 | 77.667 | 10.9649 | 2.0019 |
| control | 33 | 61.212 | 12.5019 | 2.1763 |

Based on the table above, it showed that there were two classes, experimental and control class. Experimental class showed that there were 30 students, mean score of experimental was 77.67, and Standard Deviation for experimental class was 10.9649 . Meanwhile, in control class showed that there were 33 students, mean score of control class was 61.21 , and Standard Deviation for control class was 12.5019.

## B. Hypothesis Testing

The hypothesis testing of this study as follows:

1. If P -value $<\alpha, \mathrm{H}_{0}$ is rejected

It means that there is significant difference score between experimental class and control class or Semantic Feature Analysis is effective on students' vocabulary acquisition.
2. If P -value $\geq \alpha, \mathrm{H}_{0}$ is not rejected

It means that there is no significant difference score between experimental class and control class or Semantic Feature Analysis is not effective on students' vocabulary acqusition.

To know whether the P -value was bigger or smaller than $\alpha(0.05)$, the researcher analyzed the data by using SPSS 16.0.

Table 4.12: The Result of Analyzing Independent Sample T-test

|  | Levene's Test for Equality of Variances |  | t-test for Equality of Means |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | F | Sig. | t | Df | Sig. (2tailed) | Mean <br> Differe nce | Std. <br> Error <br> Differe nce | 95\% <br> Confidence Interval of the Difference |  |
|  |  |  |  |  |  |  |  | Lower | Upper |
| Valu Equal e variances assumed | . 516 | . 475 | $\left.\begin{array}{\|r} 5.53 \\ 0 \end{array} \right\rvert\,$ | 61 | . 000 | 16.454 | 2.9757 | 10.504 | 22.404 9 |
| Equal variances not assumed |  |  | 5.56 5 | $\begin{array}{r} 60.9 \\ 29 \end{array}$ | . 000 | 16.454 5 | 2.9570 | 10.541 5 | 22.367 6 |

Based on the table above, the result of $t$-test can be concluded that significant value (sig-2 tailed) was 0.000 , and it was smaller than 0.05 ( $0.000<0.05$ ). It means that null hypothesis $\left(\mathrm{H}_{0}\right)$ was rejected. Thus, it can be interpreted that there was significant difference on students' score between students who were taught by using Semantic Feature Analysis and conventional method. It means that Semantic Feature Analysis is effective on students' vocabulary acqusition.

## C. Discussion

In this part, the researcher presents the discussion of analyzed data that has been presented in previous sub chapter. Based on the analysis, the post-test mean of control group was 61.21 . While the post-test mean of experimental group was 77.67. The result also showed that P value or sig is smaller than $\alpha$ (0.05). It indicated that after the researcher gave treatment to the experimental group, their score was really increase than before. In this case, teaching vocabulary by using Semantic Feature Analysis was better than without using Semantic Feature Analysis. Thus, it can be concluded that Semantic Feature Analysis strategy was effective on students' vocabulary acquisition.

Based on the research method in chapter III, the researcher conducted quasi experimental with two groups pretest-posttest design. The first step is the researcher conducted pre-test to the both control group and experimental group. The test is vocabulary test which consisted of 20 question in form of multiple choices. It is used to know the students' earlier knowledge before they got treatment. The second step is given treatment to the students. The researcher used Semantic Feature Analysis for the treatment in experimental class. While in control class, the researcher used conventional method or white board as the media of teaching and learning. Although some of students felt difficulty and confused in applying this strategy, it was really clear that the students who got treatment feel very enjoying and they are more enthusiastic in teaching
learning process. While the students in control class looked very bored when the researcher delivered the material. In this case, the researcher did some steps on the treatment. First, the teacher gave students Semantic Feature Analysis grid or matrix based on category that has been selected. Then, the teacher guided students through the matrix, having them determine if the words on the left side possess the features listed. Finally, the students complete the matrix by adding plus sign or minus sign to indicate feature possession. After the students got treatment, the researcher gave them post-test. The test is also vocabulary test which consisted of 20 questions in form of multiple choices. The post-test was conducted to know students' score after they got treatment.

Anders (1983) conducted Semantic Feature Analysis on the reading comprehension, the result showed that Semantic Feature Analysis is significantly improve the reading comprehension of adolescent learning disabled students. In addition, Zahra, Nahid, Amin, and Leila (2017) also conducted a research to compare the effectiveness of Semantic Feature Analysis (SFA) and Phonological Components Analysis (PCA) for anomia treatment in Persian speaking patients with aphasia. The result showed that both SFA and PCA treatments have the potential to improve naming ability in participants

Semantic Feature Analysis is not only a good strategy to enhance students' vocabulary skill, but the students can build their prior knowledge, master important concepts, and make connections. Fenton
(2006:1) stated that Semantic Feature Analysis is a good way to build prior knowledge and reinforce vocabulary. This strategy also help students understand the meaning of new vocabulary words (Ditkson, 2007:1). Besides, Semantic Feature Analysis is easily implemented and simple to use in the classroom because the teacher just provided Semantic Feature Analysis grid to apply this strategy. In addition, this strategy can be implemented with the whole group or small group so that it can promote students' interaction and discussion.

Based on the result, it can be concluded that using Semantic Feature Analysis is effective on students' vocabulary acquisition at Junior High School, especially at second grade students of MTs Darul Huda. Furthermore, Semantic Feature Analysis provides many opportunities for students to enhance their vocabulary acquisition. The activity also increased the students' motivation and create a relax atmosphere, so the students did not get bored. Therefore, Semantic Feature Analysis is a useful strategy that can be used in teaching learning process on students' vocabulary acquisition.

