#### **Chapter Four**

### **Findings and Discussion**

This chapter presents findings and the discussion of the research. The findings section provides results from the vocabulary mastery test and TOEFLlike test. The discussion section provides the answer to the research questions and the verification of this research hypothesis.

# Findings

In this part, the researcher presents the findings of three research questions. The first research question is 'How is the EED of UMY students' vocabulary mastery category level?'. The second research question is 'How is the EED of UMY students' listening ability category?'. The third research question is 'What is the correlation between EED of UMY's students' vocabulary mastery level and their listening ability?'.

The first research question of this study is "How is the EED of UMY students' vocabulary mastery category level?". The data were collected from 70 students of EED of UMY batch 2016. The data were obtained from students' score in do VLT test by Meara 1992 test. Schmitt (2008) stated, "large vocabulary is necessary to function in English: 8000 – 9000 families for reading, and perhaps as many as 5000 – 7000 families for oral discourse" (p. 329).

### **Vocabulary Mastery Result**

Vocabulary has many levels based on the classification by Schmidt (2008). Students who are in college there are mostly on intermediate levels. Students with a vocabulary closer to 5000 words families would usually be clasified as Intermediate level. The data presented that the minimum score of students was 2200 and their maximum score was 6900. Student who has answer all test with correct/no mistaken gain score 69 (it represents 6.900-word families) Moreover, if there any mistake, the score followed by the total of correct answer. Based on Supranto's (2006) formula that was written in chapter three (see table 3), the researcher categorized students' vocabulary mastery level into three categories with interval 1500. There were weak, moderate and good categories.

| Students' Vocabulary Mastery<br>Category | Frequency | Percent |
|--|-----------|---------|
| 5.201 - 6.900 = Good                     | 25        | 36%     |
| 3.701 - 5.200 = Moderate                 | 40        | 58.5 %  |
| 2.200 - 3.700 = Poor                     | 5         | 5.5%    |
| Total                                    | 70        | 100%    |

Table 3: The Vocabulary Mastery Frequency

Based on the categories of students' vocabulary size level above, the result shows that there are only five students (5.5%) who have poor vocabulary score. Then, there were forty students (58.5%) who have moderate score and twenty-five students have good score of mastery vocabulary (36%). Schmidt (2008) stated that students who are intermediate the word-families should be on range 4000-5000 or better.



Figure 2: Vocabulary Mastery Frequency

The result shows that the mean value of students' vocabulary mastery is 4577-word families. Then, the histogram also describes that most of EED of UMY batch 2016 students have a moderate score of vocabulary mastery. The conclusion of all data is student's vocabulary mastery at a moderate level.

## **Students Listening Ability**

The EED of UMY student's listening ability. The second research question of this research is "How is the EED of UMY students' listening score category?". The data were collected from 70 students' EED of UMY batch 2016 in listening section score of TOEFL test. The data presented that the minimum score was 0.8 and the maximum score was 8.7. Based on the mean of the data, it can be concluded that there are three categories of students listening score, those three categories are separated by interval 2.6. There was poor category that is who has score 0,8 until 3,4. Moderate category was the score between 3,5 and 6,1., Last is good category, who has score between 6,2 and higher until 8,7.

| Students' Listening Score<br>Category | Frequency | Percent |
|---------------------------------------|-----------|---------|
| 6,2 - 8,7 = GOOD                      | 26        | 34.3 %  |
| 3,5 - 6.1 = MODERATE                  | 32        | 45.8 %  |
| 0,8-3,4 = POOR                        | 12        | 19.9 %  |
| Total                                 | 70        | 100 %   |

Table 4: The Students' Listening Score Frequency

Based on the categories of students' listening score above, the result shows that there are twelve students from the total students or (19.9 %) students who have a poor score, thirty-two students (45.8 %) who have a moderate score, and twenty-six students (34.3 %) who have a good score.



Figure 3: The Listening Score Frequency

The result shows that the value of students' listening score means is 4.67. Afterward, based on the category of students' listening score, the listening ability of the student was on range 3,5 until 6,1 it means on the moderate level close to good level. Vidal (2003) stated that students in moderate level of listening means that the ability of the students is average but quite good in listening skill. Students are in line with the research that is intermediate level. So, the level proved by a histogram that says an average of students in EED UMY is in moderate almost good in listening skill.

# **Correlation between Vocabulary Mastery and Listening Skills**

The third research question of this research is about the correlation between students' vocabulary mastery and their listening ability. Before the researcher checked whether there is a correlation or not between those variables, the researcher checked the normality and linearity of the data first. The researcher used SPSS v.22 to check them.

Normality test. The normality test of this research is using type

**One-Sample Kolmogorov-Smirnov Test** Unstandardized Residual Ν 70 Normal Parameters<sup>a,b</sup> Mean .0000000 Std. Deviation 12.76696991 Most Extreme Differences .101 Absolute Positive .101 -.058 Negative Kolmogorov-Smirnov .101 .074<sup>c</sup> Asymp. Sig. (2-tailed)

a. Test distribution is Normal.

b. Calculated from data.

analysis to find out whether the data distribution was normal or not. The data is considered normal if the significance value is higher than 0.05 ( $\alpha$  > 0.05). The table below

provides the data of

Kolmogorov Smirnov

normality test.

Table 8: The Normality Test Result of Vocabulary Mastery

| lests of Normality |
|--------------------|
|--------------------|

|                  | Kolmogorov-Smirnov <sup>a</sup> |    | Shapiro-Wilk |           |    |      |
|------------------|---------------------------------|----|--------------|-----------|----|------|
|                  | Statistic                       | Df | Sig.         | Statistic | df | Sig. |
| Listening Score  | .059                            | 70 | .200*        | .982      | 70 | .425 |
| Vocabulary Score | .110                            | 70 | .074         | .942      | 70 | .003 |

\*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

From the table above, the researcher can see that the significance value of this research data is 0.074 and 0.200. Since 0.074 and 0.200 are higher than  $\rho$  0.05, the data of those two variables of the research are normally distributed.

**Hypothesis test.** This test was done to search for the third research question of this research. Hypothesis test was done to prove whether the hypothesis of this research is acceptable or not. The correlation between students' vocabulary mastery level and their listening ability was identified using Pearson Product Moment Correlation (r).

|   | Null Hypothesis   | Test                                      | Sig.                | Decision                          |
|---|---|---|---------------------|-----------------------------------|
| 1 | The distribution of Listening Score<br>is normal with mean 4.671 and<br>standard deviation 1.94.    | One-Sample<br>Kolmogorov-<br>Smirnov Test | .200 <sup>1,2</sup> | Retain the<br>null<br>hypothesis. |
| 2 | The distribution of Vocabulary<br>Score is normal with mean 45.771<br>and standard deviation 14.42. | One-Sample<br>Kolmogorov-<br>Smirnov Test | .200 <sup>1,2</sup> | Reject the<br>null<br>hypothesis. |

Hypothesis Test Summary

Asymptotic significances are displayed. The significance level is .05.

<sup>1</sup>Lilliefors Corrected

<sup>2</sup>This is a lower bound of the true significance.

The table below shows the result of the hypothesis test.

|                  |                     |                 | Vocabulary |
|------------------|---------------------|-----------------|------------|
|                  |                     | Listening Score | Score      |
| Listening Score  | Pearson Correlation | 1               | .465**     |
|                  | Sig. (2-tailed)     |                 | .000       |
|                  | Ν                   | 70              | 70         |
| Vocabulary Score | Pearson Correlation | .465**          | 1          |
|                  | Sig. (2-tailed)     | .000            |            |
|                  | Ν                   | 70              | 70         |

#### Correlations

From the table above, it shows that the total sample (N) was 70, the Pearson correlation value is 0.465, and the significance value is 0.000. Cohen et al (2011) stated that "coefficient statistics are statistically significantly correlated at the  $\rho < 0.05$  levels" (p. 345). The finding above shows that significant value ( $\rho$ value) of this research was 0.000 which is lower than 0.05. It means that there is a positive and significant correlation between students' vocabulary mastery and their listening skills. Moreover, the null hypothesis (H0) of this research is accepted.

The correlation proportion can be seen from Pearson correlation value (rvalue). The table above showed that r score was 0.465. Based on Sugiono's (2011) criteria of correlation level 0.410 was on moderate level (0.40-0.599). There is a positive correlation between vocabulary mastery and listening skills. The correlation degree is moderate.

# Discussion

In this part, the researcher presents the discussion of three research questions of this research. The first research question is about EED of UMY students' vocabulary mastery level category. The second research question is about EED of UMY students' listening ability category. The third research question is about the correlation between EED of UMY's students' vocabulary mastery level and their listening ability.

**EED of UMY students' vocabulary mastery.** The first research question of this research is about how EED of UMY students' batch 2016 vocabulary mastery level is. The result showed that the mean score of students' vocabulary

mastery score was 4577-word families. Based on the categories of vocabulary mastery score in table 3, score 2500 - 4900 was on the "moderate" category. Hence, it can be concluded that students of EED of UMY batch 2016 have average level of vocabulary mastery. They have average level is because they now on the level of pre-intermediate. Even they are in third semester, the score represents their ability in pre-intermediate. It can be said that students can be improve their vocabulary through semester to reach the minimal post intermediate.

Based on Read's (2000), EED of UMY batch 2016 students' vocabulary mastery level was lower than the minimal words families that undergraduate students need which is 5,000 words. It was also lower than Milton and Treffers-Daller's (2011) and Harji et al (2015) who mentioned that the minimal words families that undergraduate students have to master are 7,500 and 10,000. The data of students' vocabulary mastery frequency showed that all of the students were in moderate and good category. The main reason why the level of students' vocabulary mastery was moderate was because they do take seriously in learning vocabulary in first semester. In order to defend the students' performance, the lecturer could help them by providing the English listening and reading material and giving them assignment which required them to listen or read the materials. In the future, if they take the vocabulary mastery test again, their score will increase because in each semester they get more English language input which make them get more vocabulary mastery.

42

**EED of UMY students' listening ability.** The second research question of this research is about how EED of UMY students' listening ability is. The result showed that students who set score 3,5 - 6,1 are 32 students. Based on the categories of listening score more than thity students are past moderate level of listening, more or less than 45%. Their score is moderate, it represents the ability of students are quite good or average as intermediate levels. Vandergrift (2007) stated that the listening skills in intermediate level has score on range 4.0 until 5.0 for pure listening assessment. Therefore, around 32 students are in the stage which explained by Vandergrift.

The correlation between students' vocabulary mastery and listening ability. The result showed that the significance value was 0.000, and this value was lower than 0.05. It means that there is a positive correlation between EED of UMY students' vocabulary mastery and their listening ability. Positive correlation means if the students' vocabulary mastery level is higher, the students' listening score will be higher too. Likewise, when the students' vocabulary mastery is lower, the students' listening score will be lower too. Furthermore, based on Sugiono's (2011) criteria correlation value, the strength of the correlation was in moderate level because the result was 0.465. Moderate correlation means that the relationship between both variables is neither too strong nor too low.

From the result above, it can be concluded that the null hypothesis of this research, there is a correlation between students' vocabulary mastery level and their listening score, is accepted. Moreover, based on the Schmidt (2000) mentioned about the main point of listening strategy, the correlation between

students' vocabulary towards their listening ability is because of vocabulary mastery. The finding of this research was also supported by Goh (2000) statement that there is two type of strategies that useful for the students in listening. Those strategies are Note-Taking, Predict while listen. Those strategies can be implemented with acquiring new vocabulary.