THE CORRELATION BETWEEN THE SECOND YEAR STUDENTS’ VOCABULARY MASTERY AND THEIR ABILITY TO COMPREHEND NARRATIVE TEXT AT SMAN 1 LUBUK ALUNG

Agnessya Wulandari¹, Khairul Harha², Lailatul Husna²
¹The Student of English Department, The Faculty of Teacher Training and Education, Bung Hatta University
E-mail: agnessya_wulandari@yahoo.co.id
²The Lecturers of English Department, The Faculty of Teacher Training and Education, Bung Hatta University

Abstract

The type of this study was correlation design. The purpose of this study was to determine relationship between vocabulary mastery and ability to comprehend narrative text. The population of this research was the second year students of SMAN 1 Lubuk Alung. The total members of sample in this research were 30 students. The data of this research were collected by using two kinds of instruments. The first is vocabulary test, the second is reading test. To make the instruments reliable, the researcher gave try out test to the students out of the sample. It was found the reliability index of the vocabulary test was 0.84, and reliability index of reading test was 0.76. It means that the instruments were very reliable. Based on the result of the data analysis, the researcher found that the value of r-calculated of this research was 0.75, while the value of r-table with level of significance 0.05 and degree of freedom (df= n-2) was 0.362. It means that the r-calculated was higher than r-table (0.75>0.362). Therefore, the alternative hypothesis of this research stating that there is significant correlation between second year students’ vocabulary mastery and their ability to comprehend narrative text at SMAN 1 Lubuk Alung was accepted. In line with the finding of this study, it can be concluded that, the correlation between students’ vocabulary mastery and their ability to comprehend narrative text at SMAN 1 Lubuk Alung was significant. Based on the conclusion, in order to improve students’ reading ability, it is suggested to English teacher guide their students to develop their vocabulary. Suggestion also goes to the students to make effort to increase their mastery in vocabulary by looking the dictionary or asked the teacher when their confused with the meaning of the word since complexity of a reading text caused by vocabulary mastery.

Key words: correlation, vocabulary mastery, reading ability, comprehension, narrative text.

Introduction

Reading is one of the four language skills that should be possessed by students. As a language skill, there are three levels of reading skill; decoding, fluency and comprehension level. The first level is decoding (sounding out) level is the foundation of reading instruction. The second, fluency level is the ability to read accurately and expressively while
maintaining a rate of speed that facilitates comprehension. The last, comprehension level is the ability to understand what has been read, and it involves strategies that students learn to use when reading independently, (Hollowel, 1999).

Reading is a process to get information. It means that if someone reads a text, she or he will get information. Wikipedia (2012) states that reading is a means of language acquisition, of communication, and sharing information and ideas. Pardo in Snowball (2006) says that comprehension is a process in which readers construct meaning by interacting with text through the combination of prior knowledge and previous experience, information in the text, and the stance the reader takes in relationship to the text. It means that the reader should be able to comprehend what the text tell about.

One of the language components that affects the mastery of reading skill is vocabulary. In other words, vocabulary mastery plays a central role in any effort to learn a language because language learners can express their ideas only if they have adequate storage of words. Of course, it is impossible that students can express their idea clearly without knowing sufficient words. According to Webster Ninth Collegiate Dictionary (2002), vocabulary is a list or collection of words arrange in alphabetical order and explain; a dictionary or lexicon, either of whole language, a single work or author, a branch of science. It also states that vocabulary is a listing of the words used in some enterprise, a language user’s knowledge of words, and the system or symbols serving as a means of expression.

Based on findings of research conducted by Zilhanip (2013), there is positive and significant correlation between student’s vocabulary mastery and their reading ability in comprehending text. It means that, vocabulary mastery gives much contribution in reading comprehension. In other word, if the students vocabulary is good, their reading comprehension is good. The differences with this research are the kind of text and the population. In this research the researcher used narrative text and the second year student’s of SMAN 1 Lubuk Alung as the population.

Junior high school students learns about text. They have to know kinds of texts and how to comprehend the text. The second grade students learn about descriptive text, recount text, procedure text, and narrative text. One of text that should be learned is narrative. A narrative text is a meaningful
The Relationship between Vocabulary Mastery and Comprehending Reading Text

The correlation between vocabulary mastery and reading comprehension has been discussed by many experts. Huyen (2013) found that knowing at least 90 percent of the words of a text enables the reader to get the main idea from the reading and guess correctly what many of the unfamiliar words mean, which will help them learn new words.

Vocabulary mastery has relationship with comprehending a reading text. According to Athans (2010), vocabulary knowledge and reading comprehend have strong relationship. So students need word knowledge to support their comprehension. It is also supported by Sedita (2005) who states that vocabulary knowledge is crucial in reading comprehension and determining how good the students are in comprehending the texts.

Based on the opinions of the experts above, we can conclude that vocabulary mastery has relationship even strong with comprehending a reading text.

Research Method

Gay and Mills (2006: 10) divide research methods into five categories,
descriptive, correlational, causal-comparative, experimental and single-subject experimental. In this research, the researcher tried to find out the correlation between the second year student vocabulary mastery and their reading ability in comprehending narrative text. That is why in this research the researcher used the correlational method. Gay (1987: 229) states that correlational research is a type of descriptive research, primarily because it describes an existing condition. Thus, this type of research involved collecting data in order to determine whether, and to what degree, a relationship exists between two quantifiable variables (students’ vocabulary mastery and reading comprehension ability).

According to Gay (1987:100), population is the group to which the result of a study will be generalized. The population of this research was the second year students of SMAN 1 Lubuk Alung. The researcher chose them as population of this study because they have learned about vocabulary, reading and narrative text. The number of member of the population was 261 students. They were distributed into nine classes, comprising six classes of exact science (IPA) and three classes of social science (IPS). The distribution of members of population according to the student’s majoring and classes is shown in Table 3.1

<table>
<thead>
<tr>
<th>No</th>
<th>Students’ Major</th>
<th>Class</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Exact Science</td>
<td>II IPA 1</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>II IPA 2</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>II IPA 3</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>II IPA 4</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>II IPA 5</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>II IPA 6</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Sub Total</td>
<td></td>
<td>180</td>
</tr>
<tr>
<td>2</td>
<td>Social Science</td>
<td>II IPS 1</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td></td>
<td>II IPS 2</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td></td>
<td>II IPS 3</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>Sub Total</td>
<td></td>
<td>81</td>
</tr>
</tbody>
</table>

Due to the large member of population as shown in Table 3.1 above in this study the researcher used sample. Gay and Mills (2006: 99) state that sample is representative number of participants for a study in the larger group. In other words, the selected individuals comprise a sample and the larger is refer to as a population. For considering the result, the minimal size of sample is 30. The sample for correlational was selected using an acceptable sampling method, and 30 subjects are generally considered to be a minimally acceptable sample size (Gay, 1987: 242).
Theoretically, there were some techniques which could be used to take a sample, but in this research the researcher used cluster random sampling technique. Cluster sampling was used to select sample since the members of population are distributed into groups or classes. The cluster sampling technique is sampling techniques by which the researcher selected a group of subjects rather than individuals. Gay and Mills (2006: 116) state that cluster sampling is more convenient when the population is very large or spread out over a wide geographic area. The sample was chosen randomly because the researcher assumed that population was homogeneous since they were taught with the same material, syllabus and had some period of time allocated for English subject. The population that the researcher took as sample was 30 students (23 students from XI IPA2 and 7 students’ from XI IPS3)

The vocabulary test was used to collect data on student’s vocabulary mastery. The vocabulary test that researcher arranged consisted of 60 items of questions in the form of multiple choice. The researcher used the form of multiple choice because the students could be easy in answering the questions and 60 item is not too much for testing vocabulary mastery. The aspect of vocabulary that would be tested are such; synonym, antonym and meaning in the context, and time allocation is 60 minutes.

To get the data for reading ability, the researcher gave the reading test to measure the student’s reading ability. The test was constructed in the form of multiple choice test. The test covered of five narrative texts and consisted of 30 questions and the students were given 60 minutes to do the test.

The test used as instrument should be valid. To have a valid test, the researcher used content validity. A test is valid if
measures what it is supposed to be measured (Arikunto: 2010: 67). To get a valid test, it is constructed based on curriculum, syllabus and teaching materials and it was consulted with English teacher who taught at AMAN 1 Lubuk Alung.

To know the reliability of the two tests, the researcher used Split-Half method and product moment correlation formula. Singh et.al (2008: 79) state that split – half method (odd-even) typically provides largest reliability coefficients for a given test. It is a kind of method which divides the items of the test into odd group and even group. The formula is as follows (Arikunto, 2010: 72)

\[ r_{xy} = \frac{n \sum xy - (\sum x)(\sum y)}{\sqrt{[n \sum x^2 - (\sum x)^2][n \sum y^2 - (\sum y)^2]}} \]

After that, the result of correlation analysis above was analyzed by using Spearman Brown formula (Arikunto, 2010: 95) to know the reliability of the whole test :

\[ r_{ii} = \frac{2r_{xy}}{1 + r_{xy}} \]

The researcher used degree of coefficient correlation based on Arikunto’s idea (2010: 75)

- .81 – 1.0 : very high correlation
- .61 – .80 : high correlation
- .41 – .60 : moderate correlation
- .21 – .40 : low correlation
- .00 - .20 : very low correlation

Based on the result of reliability analysis of vocabulary mastery test and reading comprehension test it was found that the reliability of vocabulary mastery test was 0.84 (very high correlation) and reading comprehension test was 0.76 (high correlation).

To have good item test, the researcher did item analysis. The item difficulty is measured by the following formula (Arikunto: 2010)

\[ p = \frac{B}{JS} \]

Based on the result of item difficulties analysis of vocabulary mastery test and reading comprehension test it was found that 57 items were easy, 13 items were moderate for vocabulary mastery test and 13 items were easy, 2 items were moderate for reading comprehension test

The item discrimination is measured by separating the students into high and low group. To find the index of item discrimination, the researcher grouped
the students into high and low group. Item discrimination (ID) is the extent to which an item differentiates between high- and low-ability test-takers (Brown, 2010:71). A test item that can or cannot answered correctly by both smart and poor students is considered as a bad item because it does not have item discrimination. To do this item discrimination, all students were divided into two groups; upper and lower group. Because the size of sample was relative small, the researcher decided the half above as high group and half below as low group. The researcher used the following formula (Arikunto, 2010: 213):

\[ D = \frac{BA}{JA} - \frac{BB}{JB} \]

The classification of item difficulties suggested by Arikunto (2010) is as follows:

- \( P = 0.00 – 0.29 \) is difficult
- \( P = 0.30 – 0.69 \) is moderate
- \( P = 0.70 – 1.00 \) is easy

Based on the result of item difficulties analysis of vocabulary mastery test and reading comprehension test it was found that 57 items were easy, 13 items were moderate for vocabulary mastery test and 13 items were easy, 2 items were moderate for reading comprehension test.

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\[ D = \frac{BA}{JA} - \frac{BB}{JB} \]

The result of item discrimination is classified into the following categories:

- \( D = 0.00 – 0.19 \) = poor
- \( D = 0.20 – 0.29 \) = satisfactory
- \( D = 0.40 – 0.69 \) = good
\[ D = 0.70 - 1.00 = \text{excellent} \]

Based on the result of item discrimination analysis of vocabulary mastery test and reading comprehension test, it was found that 11 items were good, 32 items were satisfactory, 17 items was poor for vocabulary mastery test and 1 items 1 was excellent, 11 items were good, 13 items were satisfactory and 5 items were poor for reading comprehension test.

Based on the result of item difficulty and item discrimination analysis of vocabulary mastery test and reading comprehension test, it was found that 42 items were accepted (1, 2, 3, 4, 5, 7, 8, 10, 12, 13, 16, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 31, 32, 34, 35, 36, 37, 38, 39, 40, 41, 43, 44, 46, 49, 50, 51, 52, 54, 55), 18 items were revised (6, 9, 11, 14, 15, 17, 30, 33, 42, 45, 47, 48, 53, 56, 57, 58, 59, 60) for vocabulary test try out. For reading comprehension test try out, it was found that 25 items were accepted (1, 2, 3, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 25, 26, 30), 5 items were revised (4, 24, 27, 28, 29). (See appendix 9 and 18)

As already discussed previously, the researcher used two kinds of instruments to get the data; first was vocabulary test for gathering data on students’ vocabulary mastery, and the second was reading test for gathering data on students’ reading ability. The technique of gathering data is explained as follows:

a. Data from Vocabulary Test
1) The researcher collected the students’ answer sheet.
2) The researcher read and corrected students’ answer sheet.
3) The researcher gave score 1 for the correct answer and 0 for the wrong answer. The minimum point is zero the maximum point is 42.
4) The researcher counted the total score for each student.

b. Data from Reading Test
1) The researcher collected the test and read the students’ answer sheet.
2) The researcher read and corrected students’ answer sheet.
3) The researcher gave score 1 for the correct answer and 0 for the wrong answer. The minimum point is zero the maximum point is 25.
4) The researcher counted the total score of each student.

**FINDING AND DISCUSSION**
The Result of Descriptive Analysis

a. Students’ Vocabulary Mastery

Based on the result of analyzing data on vocabulary test, it was found that the lowest score for vocabulary mastery was 25 and the highest score was 31 (see appendix 22). Mean of the vocabulary test was 27.86 and the standard deviation was 1.45 (see appendix 22). It was also found most students had moderate on vocabulary as shown in Table 4.1

Table 4.1 : Classification of Students’ Vocabulary Mastery

<table>
<thead>
<tr>
<th>Vocabulary Mastery</th>
<th>Number of Students</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>7</td>
<td>23.33 %</td>
</tr>
<tr>
<td>Moderate</td>
<td>22</td>
<td>73.34 %</td>
</tr>
<tr>
<td>Low</td>
<td>1</td>
<td>3.33 %</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100%</td>
</tr>
</tbody>
</table>

b. Students’ Reading Ability

Based on the result of analyzing data on reading, it was found that the lowest score for reading was 20 and the highest score was 25 (see appendix 28 ). Mean of the vocabulary test was 23.1 and the standard deviation was 1.48 (see appendix 27). It was also found most students had moderate ability on reading as shown in Table 4.2

Table 4.2 : Classification of Students’ Reading Ability

<table>
<thead>
<tr>
<th>Vocabulary Mastery</th>
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</tr>
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<td>22</td>
<td>73.34 %</td>
</tr>
<tr>
<td>Low</td>
<td>1</td>
<td>3.33 %</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100%</td>
</tr>
</tbody>
</table>

Testing Hypothesis

As stated before, research hypothesis of this study is that there is a correlation between the second year students’ vocabulary mastery and their ability to comprehend narrative text at SMAN 1 Lubuk Alung. Based on the finding the result inferential analysis, it could be seen that value of r-calculated in this research was 0.75 (see appendix29). To test the hypothesis, the researcher compared the r-calculated with r-table. The hypothesis was accepted if the r-calculated was higher than r-table. As a matter of fact r-calculated was higher than r-table (0.75 > 0.362). It means that the correlation between vocabulary mastery and reading comprehension was significant. Therefore, the hypothesis that states that, “there is a significant correlation between the second year students’
vocabulary mastery and their reading ability in comprehending narrative text at SMAN 1 Lubuk Alung was accepted.

DISCUSSION

The result of the data analysis showed there was a positive and significant correlation between students’ vocabulary mastery and reading comprehension. Its index coefficient correlation was 0.75. Based on the classification of correlation elaborated by Arikunto (2010), the correlation of two variables (vocabulary and reading) could be classified as perfect correlation.

Since the correlation between the second year student’s vocabulary mastery and their ability to comprehend narrative text at SMAN 1 Lubuk Alung was positive and high correlation, it can be interpreted that if the students’ vocabulary mastery is good, their reading comprehension ability is good too. Coefficient determination ($r^2$) of this study was 0.56. It means that the vocabulary mastery give 56 percent for reading ability.

CONCLUSIONS

Based on finding as already discussed in the previous chapter, the researcher points out the following conclusions:

1. There was a significant correlation between the second year students’ vocabulary mastery and their ability to comprehend narrative text at SMAN 1 Lubuk Alung. It means that vocabulary mastery give contribution to reading comprehension.

2. The correlation between the second year students’ vocabulary mastery and their ability to comprehend narrative text at SMAN 1 Lubuk Alung was perfect correlation. It means that, if the students vocabulary is good, their reading comprehension is good too.

SUGGESTIONSSS

Based on the conclusions above, some suggestions were presented as follows:

1. For the students, in order to improve their reading ability they should make effort to increase their mastery in vocabulary since complexity of a reading text caused by vocabulary mastery.
2. For English teacher, in order to guide their students to develop their vocabulary.

3. The researcher suggests for further researchers to find out another aspects that make reading difficult.

REFERENCES


