The Correlation between EFL Students' Vocabulary Mastery and Their Reading Ability

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Abstrak: This study examines the correlation between students' vocabulary mastery and their reading ability. The purpose of the research is to know whether the correlation is evident between students' vocabulary mastery and their reading ability at the second semester of eight grade of SMPN 4 Pare in the academic year of 2020/2021. The researcher used a quantitative approach through correlational research. The researcher used correlational research design by vocabulary and reading tests to the second year students of SMPN 4 Pare. The researcher used a test that consists of 57 items as an instrument of this study. There were 34 students of the second year students of SMPN 4 Pare participating in this study. The study reveals that there is a strong significant correlation between students' vocabulary mastery and their reading ability at r=.8769, p<.005. This study demonstrates that the vocabulary mastery is important for reading ability as vocabulary will enhance reading comprehension. Pedagogical implication of this study is discussed.

INTRODUCTION

Basically, language is a means of expressing ideas, thoughts, opinions and feelings. It has central performance to enrich intellectuals, to follow the changes of society and students' emotion, and it is the key to reach success in studying all of the subjects of study. English is the international language used as a means of communication all over the world. As our second language, English has become the first foreign language taught in Indonesia.

The most important foreign language skills are known to be reading. According to Madox (1963) cited in Aprillia (2019) that reading is the most important single skill in study. It means, the curriculum indicated that the main focus is on reading ability, since it is assumed that the learning of reading in a second or foreign language is a main concern.

Vocabulary is one component that is very important for communicating or learning English. According to David Wilkins (1972), learning vocabulary is very important, he said that without grammar there would be "very little" to say to others, while without vocabulary "nothing" would be said to others. He explained that without knowing the structure of the grammar there would be little to say. But without (knowing) vocabulary, there will be no words that can be revealed. It's true what was revealed by Wilkins. Even though a student has good grammar skills, this ability will be useless if students do not have enough vocabulary mastery.

In addition, Read (2004) posits that second language learners are typically conscious of their limitations in their vocabulary knowledge which would hinder their ability in performing reading comprehension tasks successfully. This statement is also supported by the opinions of Stahl and Nagy (2000) arguing that it was very important to master vocabulary reflects language proficiency. They further state that people who know more words can certainly speak, and can even think, more precisely, about the

world. Moghadam, Zainal and Ghaderpour (2012) also posit that when the reader is clueless about meaning of many words, it could debilitate the students' comprehension in reading text.

Vocabulary mastery's correlation on reading comprehension has been shown by many researchers in different research designs. They are Sahiruddin (2008), Sidek (2015), Rahima (2015) and Kameli (2013), Baki (2013) who found that in determining reading comprehension, the level of vocabulary knowledge is such an essential and impacting role performance in that language and indicated that there were positive relationships. Their research was conducted using a quantitative approach and correlational method.

For most junior high school, high school, and university students, English vocabulary is often a difficulty, even though they have learned English since elementary school. Sometimes, learners often have difficulty interpreting certain words in context. Most of us only continue our reading if we find the difficult vocabulary, with the hope that in the next sentence we will understand the overall meaning of a paragraph. However, sometimes a difficult word that we ignore is a key of our reading and very important to reading comprehension. Thus, we know that students' vocabulary mastery is important in reading ability.

Based on preliminary observations from previous studies, the researchers discovered the following phenomena:

1. Students lack of vocabulary mastery.
2. Students have difficulty placing the meaning of vocabulary according to the context.
3. Students lack of reading ability.

In addition, Sidek (2015), Rahima (2015) found that vocabulary knowledge is a determinant factor for the success of a reading comprehension activity in L1 and L2. The view is evident as the participants involved in this small scale study explained that lack of knowledge in word meaning results in them being unable to process certain information which is crucial to the understanding of the whole text. This research used two reading comprehension passages: the first passage was written on their first language, namely Malay text. Meanwhile the other is in their L2, which is a text in the English language. To analyze data, comprehension task in both languages were scored by provided a mark in every answer which was correct. If the answer was partially correct, a half mark would be awarded.

Meanwhile Kameli (2013), and Baki (2013) indicated that there were positive relationships among different levels of vocabulary test and also test scores on vocabulary size/breadth of vocabulary knowledge, and reading comprehension. Different from previous research, this study used reading comprehension performance of EFL Iranian students on subtests of The Vocabulary Levels Test (VLT) and Reading Comprehension Test (IELTS).

Based on several studies that the writer has reviewed, there is no much research investigating about the correlation between students' vocabulary mastery and reading ability at junior high school level, most of the research at the university and high school levels. Thus, from the explanation above, researchers hope to find out whether there is a positive correlation between students' vocabulary mastery and their reading ability at junior high school level. Students need sufficient vocabulary to understand the reading text, because vocabulary mastery has a very strong influence and correlation in reading success, which is important for students. Besides it shows they have strong relations based on the description of vocabulary and reading above. The researcher arranges the test result to show the correlation of the student's achievement in vocabulary mastery and reading ability in order to get information and data about it. The researcher seeks to discover and respond by having grades that the achievement of students in vocabulary influences their understanding of reading.

METHOD

Research Design

In this research, the researcher used a quantitative approach through correlational research. So, in this research, the researcher used correlational research design by conducting test vocabulary and reading to the second year students of Junior High School as the sample of this research in order to get the data of correlation between students' vocabulary mastery as the independent variable and their reading ability as the dependent variable.

Participants

The target population of this research is the second year students of Junior High School, the second year consists of around 333 students. Researcher choose this population because the instrument about descriptive text, aligned with second year students of Junior High School. In this research, the researcher used the simple random sampling by taking one class of second year students of SMPN 4 Pare that consists of 34 students as the participants.

Instruments and Data Collection

Based on the research purpose and the research variables the researcher used online tests; vocabulary test and reading test items as to measure students' vocabulary mastery and their reading ability of second year students of Junior High School. The tests were adapted from Apriliana (2019). Researcher chose this instrument because it was in accordance with the objectives and learning materials of students. In this research, the method of collecting data was conducted by distributing the vocabulary test and reading test to the second year students of Junior High School by Google Form.

Data Analysis

Then, after collecting the data, the researcher analyzed, examined, and concluded the result of the research by using several steps : (a). the researcher analyzed the scores of vocabulary test and reading test obtained from tests that have been done by the students, (b). then, the researcher conducted the correlation analysis by putting the scores into the Statistical Package for the Social Sciences (SPSS), (c). finally, the researcher interpreted the results and drew a conclusion related to the problem of the study.

Validity of The Study

The validity of a research is needed for every researcher. To find out whether data is valid or not, the researcher used content validity. The statistical test used in this validity test, used Pearson product moment correlation, where the measured data is interval data. Significance testing is done with criteria using the r table at a significance level of 0.05 with a 2-sided test. The rtabel value for n = 33 uses the formula (n-2), (33-2 = 31) with a significance level of 0.05 is 0.3440.

a. Validity of Vocabulary Test

From the calculation results for the validity test, it can be seen that for the Vocabulary Test variable, the validity coefficient is between 0.431 - 0.911. The results above indicate that all research instruments used have a validity coefficient value above rtabel or can be formulated as (r)> 0.3440 (rtabel) so that all research instruments used to measure the vocabulary test variable are declared valid.

b. Validity of Reading Test

From the calculation results for the validity test, it can be seen that for the Reading Test variable, the validity coefficient is obtained between 0.470 - 0.903. The results above indicate that all research instruments used have a validity coefficient value above rtabel or can be formulated as (r)> 0.3440 (rtabel) so that all research instruments used to measure the reading test variable are declared valid.

c. Reliability of Vocabulary Test

Based on the results of the table above, it can be seen that the vocabulary test variable is very reliable because it has a Cronbach's Alpha value> 0.70, which is 0.967. Therefore, it can be concluded all statement items on the vocabulary test

variable are reliable.

d. Reliability of Reading Test

Based on the results of the table above, it can be seen that the reading test variable is very reliable because it has a Cronbach's Alpha value> 0.70, namely 0.974. Therefore, it can be concluded that all statement items on the reading test variable are reliable.

RESULT AND DISCUSSION

Result

Data Presentation of Vocabulary Test and Reading Test

The study was to examine the correlation between students' vocabulary mastery and their reading ability. Based on the data analysis, the mean score of the students' vocabulary mastery is 81 with the highest score being 91 and the lowest score 67. And the mean score of the students' reading ability is 79.32, with the highest score being 90 and the lowest score being 55.

Analysis of Data

The data are gained from the student score of eight grade of SMPN 4 Pare academic year 2020/2021. Then the data will be analyzed by using Pearson Product Moment Correlation Formula. The results as follow:

Result of Normality Test

According to Ghozali (2018) the normality test has the purpose of testing whether independent and dependent variables have a normal distribution or not. The test equipment used is histogram analysis and Kolmograv-Smirnov (K-S) analysis using SPSS Statistic V. 25.0.

Based on the test results, it is known that the probability of Asymp. Sig. (2-tailed) of 0.200 for the vocabulary test variable, which means it is greater than 0.05 (0.200 > 0.05) and the probability of Asymp. Sig. (2- tailed) of 0.127 for the reading test variable, which means it is greater than 0.05 (0.127 > 0.05). So, it can be concluded that the data is declared normally distributed.

Result of Linearity Test

The test was intended to test whether the data obtained were linear or not because this was one of the requirements to be able to use the Pearson product moment formula. The researcher used SPSS Statistic V. 25.0.

Based on the results of the linearity test, it is known that the deviation from linearity value has a significance of 0.811 which means it is greater than 0.05 (0.811 > 0.05). Furthermore, it can be seen that the calculated F value is 0.618 < F table 2.28. With these results, it can be concluded that there is a significant linear relationship between the vocabulary test variables and the reading test.

Standard Deviation

The standard deviation is the deviation or measure of the distribution of the data. Based on the calculation results, it is known that the standard deviation for the vocabulary test variable is 6.247 and for the reading test variable is 7.310. The vocabulary test variable has a minimum value of 67, a maximum value of 91 and a mean of 81.00. As for the reading test variable, it has a minimum value of 55, a maximum of 90 and a mean of 79.32.

Result of Hypothetical Test

The hypothesis is very important to find out whether or not the alternative (Ha) or null hypothesis (Ho) is accepted in this research. The Pearson Product Moment's formula by using SPSS (Statistical Package for the Social Science) was computed for testing hypotheses.

The hypothesis of this research are as follows:

Ha: Among the eight grade students of SMPN 4 Pare, there is a significant correlation between the students' vocabulary mastery and their ability to read in descriptive text.

Ho: Among the eight grade students of SMPN 4 Pare, there is no significant correlation between the students' vocabulary mastery and their ability to read descriptive text.

While the criteria acceptance or rejection of hypothesis test are as follows:

Ha is accepted if Sig. $< \alpha = 0.05$

Ho is accepted if Sig. $> \alpha = 0.05$

Ha is agreed that if Sig (P value) $< \alpha = 0.05$, there is a significant correlation between students' vocabulary mastery and their reading ability.

Ho agrees that if Sig (P value) $> \alpha = 0.05$ there is no significant correlation between students' vocabulary mastery and their reading ability.

The correlation test was used to determine the relationship between the vocabulary test variables and the reading test. Calculation of the correlation test using the SPSS V.25.0 application with the following calculation results.

Correlations

		Vocabulary Test	Reading Test
Vocabulary Test	Pearson Correlation	1	.869**
	Sig. (2-tailed)		.000
	N	34	34
Reading Test	Pearson Correlation	.869**	1
	Sig. (2-tailed)	.000	
	N	34	34

**. Correlation is significant at the 0.01 level (2-tailed).

Based on the results obtained in the Pearson Product Moments' formula, it was clear that the value of Sig. (P Value) = 0.000 < α = 0.05. So, Ho was rejected and Ha was accepted. Based on the computation, it can be concluded that there was positive or a significant correlation between the students' vocabulary mastery and their ability to read in descriptive text among the eight grade students of SMPN 4 Pare. Then, based on the results of the calculation above, a correlation coefficient of 0.869 for the vocabulary test variable shows a very strong relationship to the reading test variable.

Discussion

The researcher found that this research focuses on the correlation between students' vocabulary mastery and their reading ability. This research also attempts to find out the students' ability in vocabulary mastery and reading ability. The data analysis, the mean score of the students' vocabulary mastery is 81 with the highest score being 91 and the lowest score 67. And the mean score of the students' reading ability is 79.32, with the highest score being 90 and the lowest score being 55. Referring to the findings and discussions that have been elaborated above, it is found that there is correlation between students' vocabulary mastery and their reading ability. According to the table above vocabulary test and reading ability test, it can be found that the correlation number show 0,869. It means the interpretation of the correlation is very strong.

Based on the result of vocabulary test and reading comprehension test, it can be found that the ro = 0,869 > rt = 0,344 in the significance level of 0.05 (5%) and the Sign. (2-tailed) is 0.01 < 0.05. To sum up, the ro > rt and the Sign. (2-tailed) < 0.05, it means that Hα is accepted. So, the writer can conclude that the students` vocabulary mastery is correlated with the students` ability reading ability.

From the data above the researcher can make a simple conclusion that almost all the students in eight grade of SMPN 4 Pare academic year 2020/2021 who gain

the better score in vocabulary test they get the better score in reading test too. It means the vocabulary mastery is important for reading comprehension and also the fact shows vocabulary score can support reading comprehension score. Although the scores of vocabularies and reading tests are different, the result shows that there is correlation.

CONCLUSION

The purpose of the research was to know whether there was a correlation between students' vocabulary mastery and their reading ability. Based on the result, the correlation coefficient 0.869 and P Values 0.000, the result shows that there is a significant relationship between students' vocabulary mastery and their reading ability. Referring to the result and discussion, it was found out that there is a strong correlation between students' vocabulary mastery and their reading ability. It indicates that the vocabulary mastery will significantly contribute to their reading ability. Besides that, the researcher found the limitation of this study is that the researcher cannot meet the students directly, so the researcher cannot confirm whether students really understand the test material given or not.

From the data above the researcher can make a simple conclusion that almost all the students in eight grades of SMPN 4 Pare academic year 2020/2021 who gain the better score in the vocabulary test they get the better score in the reading test too. It is meant that vocabulary mastery is important for reading comprehension and also the fact shows vocabulary score can support reading comprehension score. Although the scores of vocabularies and reading tests are different, the result shows that there is correlation.

SUGGESTION

Based on the result of the data analysis, the writer would like to give some suggestions. The suggestions are presents for the teachers, students, and further researchers.

First for teachers, it is better if the teacher motivates the students to improve their vocabulary and reading skills more. The teacher should also be more detailed in explaining the material related to the part of speech, because this is related to the students' reading comprehension ability. Vocabulary material is better to give before the students learn reading material.

Second for students, students should further improve their vocabulary mastery and reading ability. Students must master more vocabulary, then also have to read more in order to understand a passage well.

For further researchers, it is very important to understand the students' ability in mastering vocabulary and their ability to read. Researchers must adjust the test given to the material that has been studied by students. Researchers must also understand the concepts of vocabulary and reading from various experts well. In addition, this research was conducted during the pandemic, so for the further researchers must confirm to the teacher first whether the students have mastered the test material that will be given by the researcher or not.

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