

STUDENTS' VOCABULARY MASTERY AND THEIR READING COMPREHENSION

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Abstrack

Vocabulary mastery is one of the important components of language to learn. This study investigated the correlation between vocabulary mastery and reading comprehension and the influence of vocabulary mastery and reading comprehension. A total of the sample in this study was 105 students from eighth grade students. Vocabulary mastery test and reading comprehension test were the instruments to collect the data. The descriptive statistics and Pearson Product Moment correlation coefficient were used to analyze the data in this study. The findings of this study showed that there was a significant correlation ($r = 0.243$) was higher than r -table (.190). Then, the level of probability (p) significance (sig.2-tailed) was 0.013 was lower than 0.05. Thus, there was a significant correlation between the students' vocabulary mastery and their reading comprehension. From the results of regression analysis with a degree of significance of 0.013 showed that there was an influence of the vocabulary mastery on the reading comprehension of 5.9%. it could be concluded that mastery of student vocabulary was an important factor in achieving student reading comprehension.

Keywords: *vocabulary mastery and reading comprehension*

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Introduction

English is now an international language because it is used as a first, second or foreign language by people all over the world. Currently, English is the most important foreign language used by Indonesian people and all people in the world to communicate. Besides communicating, English is also used by people to do business or in other contexts. Speaking, listening, reading, and writing are the four key skills that make up the complex knowledge of language (Sharma, 2021). In teaching English at school, these four skills become the basic skills that are taught to students. One of the most important skills to teach is reading. From reading people can get a lot of information. Teaching reading basically aims to prepare students to be able to read English texts that they will learn at school. The purpose of learning English is to improve communication skills.

Reading is the main thing taught in schools because it is a very important factor for individual development. Reading is required because students are required to read English material for their own particular subject. According to Kurniawan (2015), perception and thinking are both important components of the complicated action of reading. Currently, it's crucial for people to be able to understand English. Those who can speak and read English are able to interact with others in that language. Reading texts offers a useful example for writing in English as well as the chance to master vocabulary, grammar, punctuation, and sentence, paragraph, and text organization. Because reading can help other skills, it can be inferred that reading is a crucial skill.

The purpose of reading is comprehension. Comprehension is the ability to generate the meaning of a text or relate a text message to background

knowledge. Comprehension is the reason for reading, and vocabulary plays an important role in comprehension. To be able to understand a text, the reader must use good vocabulary mastery skills. Comprehension is a process in which the reader's prior knowledge and information from the text work together to create meaning (Wibisono, 2019). Therefore, in reading we do not just read but understand the meaning of what we read. To comprehend the meaning of the entire book, the reader must comprehend each individual word. The capacity of students to master language is closely tied to their reading comprehension. The more vocabulary mastered, the easier it is for students to understand the meaning of the whole text.

Vocabulary is very important in reading comprehension. That is, there is a close relationship between vocabulary and reading. More vocabulary will make it simpler for someone to comprehend some texts. Uhan (2020) state that one of a language's most crucial abilities is vocabulary. In order to successfully teach and learn languages, especially English, vocabulary is one of the most crucial parts of all language education. Without vocabulary, it is difficult to understand a language. According to Hekmatiar and Umam (2020), the quantity and quality of a person's vocabulary determine how well-versed they are, so the larger their vocabulary, the more likely they are to be fluent speakers. This implies that linguistic proficiency is determined by vocabulary competence. Being able to communicate effectively is particularly challenging for someone who lacks adequate vocabulary mastery.

Vocabulary is the core and important part of teaching English. Without vocabulary students will find it difficult to understand others and express their own ideas. Vocabulary mastery is the ability in which a person gets and

receives many words. By mastering the vocabulary that many students will avoid misunderstandings. Conversely, if students do not master vocabulary, they will experience difficulties in learning English and communicating. According to Enda (2022), students are required to bring a dictionary and not a grammar book. By bringing a dictionary students can slowly get vocabulary little by little. So, the more vocabulary they get, the easier it will be for students to learn English. However, currently some of the students just read English texts without understanding the meaning of the texts, it becomes one of the factors that make the students not interested in reading English.

From the explanation above, the researcher already knew how important vocabulary mastery was in reading activities. The association between vocabulary mastery and reading comprehension had been demonstrated in the study of foreign languages, and vocabulary knowledge was crucial for comprehending the text and assessing students' comprehension levels.

Some researchers conducted studies on the correlation between vocabulary mastery and reading comprehension. First, Suhendra (2019) showed that there was a significant correlation between students' vocabulary mastery and reading comprehension skills although the correlation coefficient of this study could be categorized as a low level value. This showed that the results of this study mean that teaching vocabulary was a must before teaching reading comprehension skills further. The similarity in this study lied in the sampling technique used, namely simple random sampling. While the difference in this study lied in the research location used by the researchers. Second, Woga (2022) stated that there was a significant relationship between vocabulary and reading comprehension in grade 8

students of SMP TP. 45 Denpasar. From data analysis, the results of this study were assisted by several courses from experts who stated that there was a correlation between vocabulary acquisition and reading comprehension. The number of samples used in this study was what made this study similar. The data description used in the homogeneity test of the prerequisite analysis was where this study different from the previous one. The third, Furqon (2013) conducted the study which focused on the correlation between students' vocabulary mastery and their reading comprehension. This can be seen from the observed r_{xy} value of 0.7205 which means this score was significant. So it can be concluded that there was a significant relationship between vocabulary mastery and reading comprehension. The method of data collecting used in this study, tests, was similar to that used in earlier studies. While the sample, population, time, and location were different between the prior study and this one.

Based on the results of observations made by researchers at one of the junior high schools in Palembang in class VIII, it was known that class VIII students had problems in reading. Seen at the time of learning to read in the classroom, students had difficulty in understanding the meaning of the text they read because of a lack of vocabulary knowledge. So, the teacher must interpret every word in every reading lesson. One of the English teachers stated that there had never been a vocabulary test for students, but she always teaches vocabulary lessons together with learning reading.

Then, the reason of the researcher carried out this research because vocabulary mastery was closely related to reading comprehension. If they had adequate vocabulary, they could be

confidence in learning English. The meaning of the English material that was read and would be examined clearly understood by the students. Consequently, students had the awareness to learn English well. Then, to find out whether there was a close relationship between vocabulary mastery and reading comprehension of the eighth grade students.

Based on the problem that was written in the background above, the researcher formulated the problem in research as follow: (1) was there any significant correlation between vocabulary mastery and reading comprehension of the eighth grade students?, (2) was there any significant influence between vocabulary mastery and reading comprehension of the eighth grade students?, and (3) how much did vocabulary mastery contribute to reading comprehension of the eighth grade students? The researcher also formulated the objectives of the study as follows: (1) to determine whether there was a significant correlation between vocabulary mastery and reading comprehension of the eighth grade students, (2) to determine whether there was a significant influenced between vocabulary mastery and reading comprehension of the eighth grade students, and (3) to know how much vocabulary mastery contributed to reading comprehension of the eighth grade students. The last, the findings of this study were anticipated to be beneficial for the process of learning English, particularly for some of the groups: (1) for the students, by furthering their vocabulary mastery, this research can aid individuals in developing their reading comprehension abilities, (2) for the teachers, the significance of this research for educators might offer guidance on enhancing vocabulary mastery and reading comprehension abilities, (3) for

the researcher, this research attempts to provide some practical learning experience with educational research as well as an understanding of educational study, especially in terms of correlation, and (4) for other researchers, this study may be taken into account by the other researchers if additional study on the same topic is conducted.

Methodology

In this study, the researcher applied quantitative research method. In accordance with the research design used and the title of this study, the researcher used the correlational method, because the aim was to study and find the relationship between two variables, namely the correlation between students' vocabulary mastery and reading comprehension. The independent variable in this study was students' vocabulary mastery (X), which was regarded as a variable that influences the conclusion or dependent variable. Then, the dependent variable was students' reading comprehension (Y), which was thought of as a variable that is influenced or affected by the independent variable.

This study used cluster random sampling technique to obtain data. The researcher decided to choose 3 classes from VIII 2, VIII 3, and VIII 4 as the sample with 105 students at one of the junior high schools in Palembang.

The Instrument

The vocabulary mastery test consisted of 60 multiple choice questions which were taken from various sources by the applicable curriculum at school. Student performance in the vocabulary test was recorded by calculating the correct answers. The wrong answer was 0 and the correct answer was 1.

Data Analysis

The researcher used the SPSS 26 application and Pearson Product Moment correlation coefficient to examine the data after gathering it from two variables using a test. Before analyze the correlation and regression between the independent variable (X) and the dependent variable (Y), normality and linearity test were used. If p -value was lower than 0.05 ($p < 0.05$), H_0 was rejected and H_a was accepted. It means that there was a correlation between vocabulary mastery and reading comprehension.

Findings and Discussion

The researcher showed the result of the analysis in this research used SPSS 26 version. The result of analyzing can be seen in below:

Based on descriptive statistics, the minimum score of a vocabulary mastery test was 57 and the maximum score was 95. Meanwhile, the mean score of the vocabulary mastery test was 78.12 and the standard deviation was 8.813.

Table 1. The Descriptive Statistics of Vocabulary Mastery

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Vocabulary Mastery	105	57	95	78.12	8.813
Valid N (listwise)	105				

The results showed that there were 40 students (38.10%) were in the excellent category, 54 students (51.43%) were in the good category, 8 students

(7.62%) were in the sufficient category, and 3 students (2.86%) were in the poor category.

Table 2. The Distribution of Vocabulary Mastery

No	Score	Description	Students	Percentage
1	80 – 100	Excellent	40	38.10%
2	70 – 79	Good	54	51.43%
3	60 – 69	Sufficient	8	7.62%
4	50 – 59	Poor	3	2.86%
5	0 – 49	Very Poor	0	0.00%

Based on descriptive statistics, the minimum score of the reading comprehension test was 50 and the maximum score was 98. Meanwhile, the

mean score of the reading comprehension test was 78.09 and the standard deviation was 13.318.

Table 3. The Descriptive Statistics of Reading Comprehension

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Reading Comprehension	105	50	98	78.09	13.318
Valid N (listwise)	105				

The results showed that there were 50 students (47.62%) were in the excellent category, 26 students (24.76%) were in the good category, 17 students

(16.19%) were in the sufficient category, and 12 students (11.43%) were in the poor category.

Table 4. The Distribution of Reading Comprehension

No	Score	Description	Students	Percentage
1	80 – 100	Excellent	50	47.62%
2	70 – 79	Good	26	24.76%
3	60 – 69	Sufficient	17	16.19%
4	50 – 59	Poor	12	11.43%
5	0 – 49	Very Poor	0	0.00%

According to the Kolmogorov-Smirnov test findings for normality, the significance for the student's vocabulary mastery was 0.069, which was higher than 0.05. However, the significance for student reading comprehension was

0.224 which was higher than 0.05. Thus, the researcher concluded that the vocabulary mastery test and reading comprehension test tested were normally distributed. The data analysis was based on Monte Carlo.

Table 5. One-Sample Kolmogorov-Smirnov Test

	Vocabulary Mastery	Reading Comprehension
N	105	105
Mean	78,12	78,09
Std. Deviation	8,813	13,318
Sig. (2-tailed)	,069	,224

The linearity test was performed using the ANOVA table. If the deviation from the linearity was greater than 0.05, then the data was linear. The result reveals that the deviation from linearity

was 0.065. This means that 0.065 was higher than 0.05 and indicates that there was linear relationship between the independent variable and the dependent variable.

Table 6. The ANOVA Table of Linearity Test

			Sum of Squares	df	Mean Square	F	Sig.
RC * VM	Between Groups	(Combined)	5976,641	21	284,602	1,894	,022
		Linearity	1085,356	1	1085,356	7,224	,009
		Deviation from Linearity	4891,285	20	244,564	1,628	,065
	Within Groups		12469,588	83	150,236		
	Total		18446,229	104			

The results indicated that there was a significant correlation between vocabulary mastery and reading

comprehension based on the Pearson Product Moment Correlation Coefficient.

Table 7. The Result of Correlation Analysis

		Vocabulary Mastery	Reading Comprehension
Vocabulary Mastery	Pearson Correlation	1	,243*
	Sig. (2-tailed)		,013
	N	105	105
Reading Comprehension	Pearson Correlation	,243*	1
	Sig. (2-tailed)	,013	
	N	105	105
*. Correlation is significant at the 0.05 level (2-tailed).			

The correlation coefficient or r -obtained (0.243) was higher than the r -table (0.192). Based on the value of the correlation coefficient, the level of correlational strength indicates weak relationship correlations and a positive relationship direction. Then the probability level (p) of significance (sig.2-tailed) was 0.013, which means lower than 0.05. Thus, there was a correlation between the mastery of

vocabulary and the reading comprehension of eighth grade students at SMPN 46 Palembang.

The results of regression analysis revealed that the F -obtained value was 6.439 with a degree of significance of 0.013 which means less than 0.05. In other words, there was a relationship between the vocabulary mastery variable (X) and the reading comprehension variable (Y), and the regression model

could be used to predict the participation variable.

Table 8. The Result of Regression Analysis

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1085,356	1	1085,356	6,439	,013 ^b
	Residual	17360,873	103	168,552		
	Total	18446,229	104			
a. Dependent Variable: Reading Comprehension						
b. Predictors: (Constant), Vocabulary Mastery						

Table 9. Model Summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,243 ^a	,059	,050	12,983
a. Predictors: (Constant), Vocabulary Mastery				

The data below explained the magnitude of the correlation value or relationship (*R*), which was 0.243. From the output, a determination coefficient (*R Square*) of 0.059 was obtained which means that the influence of the vocabulary mastery variable (*X*) on the reading comprehension variables (*Y*) was 5.9%.

Interpretation

The interpretations were created based on the outcomes of the data analysis to increase the usefulness of this study. The results showed a significant correlation between students' vocabulary mastery and reading comprehension. Then, a regression test was performed and the result was that there was an influence of the vocabulary mastery variable (*X*) on the reading comprehension variable (*Y*).

First, based on the results of the Pearson Product Moment correlation coefficient, it was discovered that there was a significant correlation between students' vocabulary mastery and reading comprehension (*r*-obtained 0.243). The descriptive statistical results of the vocabulary mastery test showed that the average student score was 78.12

and the standard deviation was 8.813. Similarly, the reading comprehension result of students with an average score of 78.09 and the standard deviation was 13.318. This means that both of the vocabulary mastery and the reading comprehension have a fairly good mean score. The explanation to support this finding was that vocabulary scores can support reading scores. It turned out that students who score better in the vocabulary test, they also score better on the reading test. This was supported by Ramadani (2021) stated that students cannot read well without acquiring broad words. The mastery of vocabulary can begin with discussions influenced by short readings and activities. The fact that they don't understand the term's definition is one of the difficulties that students have when learning English. This was due to how less often students remember and apply it. While reading for vocabulary may be the most important thing to do.

Furthermore, because they are closely related to one another, vocabulary and reading cannot be separated. Students who are learning to read need to comprehend the text's words. In order to be able to capture the

ideas from the reading, they should not miss the words that are keys to the text. The words they have already read are often the key to reading and understanding them, but occasionally, many students still find words difficult. They continue reading in the hope that the meaning will become clearer later or that the words they have already read are not important. For that, with a large vocabulary, students easily comprehend the content. According to Fitri (2014) stated that a lack of vocabulary affects students' achievements in reading comprehension, as a result, vocabulary is thought to be crucial to reading comprehension.

Second, based on the results of the regression analysis there was an influenced of the vocabulary mastery variable (X) on the reading comprehension variable (Y). The result of the data was a degree of precision of 0.013 with a value of *F*-obtained of 6.439. From the value of the determination coefficient (*R Square*) of 0.059 it concluded that the influence of the vocabulary mastery variable on the reading comprehension variable was 5.9%. Sudirman (2017) explained that vocabulary scores can support reading scores. Students who score better in the vocabulary test, then they will also score better on the reading test.

There are several similar studies discussed the correlation between vocabulary mastery and reading comprehension. The results of this study was similar to the research of Fitri (2021), entitled the Correlation between Vocabulary Achievement and Reading Comprehension. The result of the Pearson-product moment correlation coefficient was 0.807, which means that there was a significant correlation between vocabulary achievement and reading comprehension in eighth-grade students at SMPN 11 Palembang. Therefore, in order to have a good

mastery in reading comprehension, students must have good mastery of vocabulary. Otherwise, this study was different from the study by Sudirman (2017), entitled the Correlation between Vocabulary Mastery and Reading Comprehension at the Second Year Students of SMPN 3 Gunungsari. These findings showed that there was no significant correlation between vocabulary mastery and their reading comprehension. The result of the analysis using Pearson-product moment for its correlation coefficient was 0.473 which means smaller than the *r*-table. It showed that the mastery of student vocabulary did not influence the reading comprehension.

In conclusion, it was explained from the test results gave to the previous students that the resulting data was distributed normally and there was a linear relationship. With the ability of each student there was a significant relationship between vocabulary mastery and reading comprehension. Furthermore, the vocabulary mastery also influenced the student's reading comprehension. As explained from their test results, the higher score they obtained on the vocabulary test, the greater the reading comprehension test. Thus, the research successfully investigated the correlation between their vocabulary mastery and reading comprehension. In the other hand, in this study it could also be found that vocabulary mastery influenced student reading comprehension.

Conclusion

After the research was conducted at the eighth grade students at one of the junior high schools in Palembang, the major findings are summarized as follows. First, it was found that the mastery of vocabulary correlated to the reading comprehension. So, the H_{01} was rejected and H_{a1} was accepted. Second,

regression analysis showed that vocabulary mastery influenced the reading comprehension variable by 5.9%. Based on the findings, it could be concluded that mastery of student vocabulary was an important factor in achieving student reading comprehension. The more vocabulary students have, the easier it will be for students to complete their reading comprehension tests. In this study, the vocabulary test score could support the reading test score. That means students who score better in the vocabulary test, then got better scores also in the reading test.

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