

# The Effect of Vocabulary Mastery on Students' Reading Comprehension

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## Abstract

This study aims to decide the impact of vocabulary mastery on the reading comprehension of junior high school students. This study utilized a quantitative strategy with simple linear regression analysis. This research data was collected through a test consisting of vocabulary mastery and reading comprehension. The sample of the research was determined using random sampling. There are 59 students from SMP Negeri 2 Pangkajene and 16 students from SMP Negeri 4 Pangkajene. The aftereffects of this study show that there is an impact of vocabulary mastery on students' reading comprehension. It is clear from the consequences of the computation of the correlation (R) is 0.573 with a coefficient of determination (R Square) of 0.329 which infers that the impact of the independent variable (vocabulary mastery) on the dependent variable (reading comprehension) was 32.9%. This shows that  $0.000 < 0.05$ . The conclusion is (H<sub>0</sub>) is dismissed and (H<sub>a</sub>) is acknowledged.

Keywords: *Vocabulary Mastery, Reading Comprehension.*

## 1. Introduction

English is an international language that is very developed and dominates the world. English is an international language that has been approved all over the world. Crystal (2000: 1) states that English is an international language. From this statement, it can be said that English is a communication tool used by the whole world. In the world of education, both in Indonesia and in other foreign countries, English is taught in an education system that has been taught from elementary school to college. In learning English four aspects of skills must be mastered by students at school, namely Listening, Reading, Speaking, and Writing. To master these four skills, it is important to master the basics of English, namely vocabulary.

Vocabulary is connected with components such as listening, speaking, reading, and

writing. Richards and Renandya (2002:255) state that "vocabulary is a person's ability to learn the language and the basis for knowing how well a person is in speaking, listening, writing and reading". In this statement, it can be said that vocabulary has a very important role because with vocabulary a person can communicate, and express opinions, ideas, feelings, emotions, and desires through vocabulary.

In addition, Tarigan (2008: 7) states that reading is an important role in increasing students' knowledge. Reading can make students get various information, insight and knowledge through various sources such as textbooks, newspapers, magazines, story books, and literature. Reading is a way to absorb and interpret information from written texts. In reading activities, it is not just about sounding readings and looking for difficult words in reading but also about understanding

the contents of reading texts. This means that reading involves understanding to understand what is being read and what its implications are.

Thusly, every student is expected to have great reading comprehension skills. Reading comprehension is the capacity to process and grasp the importance of the contents of the reading text and can integrate the knowledge that has been known previously. H. G. Tarigan (2008) states that reading comprehension is one of the endeavors to comprehend the items in the reading well. One of the best ways to read is to have good reading skills. It can be said that decent reading comprehension can assist understudies with understanding the items in the perusing text so they can figure out the meaning and also integrate the information contained in the reading.

This means that by mastering vocabulary, a person will have no difficulty in understanding the meaning contained in the reading so that from what they read, they can find a lot of information and knowledge compared to someone whose vocabulary mastery is limited. Therefore, based on the description above, this study will examine "The Effect of Vocabulary Mastery on students' Reading Comprehension in Junior High School".

## **2. Literature Review**

### **2. 1. Vocabulary**

#### *2. 1. 1. Definition of Vocabulary*

Vocabulary is one viewpoint that should be learned and dominated by students because vocabulary is related to the skills contained in English. Vocabulary is characterized as an assortment of words from a language used in various aspects of skills such as reading, speaking, writing, and listening.

#### *2. 1. 2. Definition of Vocabulary Mastery*

Vocabulary mastery is one of the components that must be mastered in English as a foreign language at the elementary, middle, and advanced levels. Vocabulary mastery is

defined as the knowledge or skills a person has in understanding and mastering words. Mastery of vocabulary is important for learning English because the potential for wider knowledge can be known by mastering vocabulary (Schmitt, 2000: 5).

In addition, Vossoughi and Zargar, (2009: 80) say that communication will be difficult and will not be meaningful without mastery of vocabulary and a lack of understanding of meaning. This means that by enriching the mastery of vocabulary a person will be able to express they are ideas and also be able to communicate well.

#### *2. 1. 3. The Aspects of Vocabulary*

In learning vocabulary, several aspects have to be considered according to Lado (1995) as follows:

##### **a. Meaning**

Meaning is a significant perspective that should be educated to understudies in vocabulary learning.

##### **b. Spelling**

Spelling and reading have a relationship with each other because this can strengthen the relationship between letters and sounds. it can be seen that some words are different from what is written, such as the letter (I) is not always pronounced / I /.

##### **c. Pronunciation**

Pronunciation is a way of pronouncing words and letters. Pronunciation is difficult to learn because not all words have to do with spelling.

##### **d. Word Class**

In semantic analysis, word class is an important feature. The categories of word classes include nouns, adjectives, verbs, adverbs and prepositions.

In addition, Harmer (1991) summarizes that to know a word it is likewise important to be familiar with the significance of the word, word formation, word use and word grammar.

**a. Meaning**

Meaning is a word that is determined or adjusted where the context of the word is formed and also has a relationship with other words.

**b. Word formation**

Word formation Can be said as word order. Word formation can create word meaning by looking at grammatical concepts. This can be seen in the formation of suffixes and prefixes (im-, in-, un-, or sub-).

**c. Word use**

Word use related to metaphors and idioms. For example, on the ball which in the idiom has a different meaning from the previous context. In the idiom on the ball, it means when someone understands the situation very well.

**d. Word grammar**

Word grammar is the grammar used to differentiate the use of words according to a predetermined grammatical pattern. A uniform appearance will assist the reader to read the paper of the proceedings. It is therefore suggested to authors use the example of this file to construct their papers. If you are copying and pasting text from another document in which the formatting is different, it's highly recommended to use the paste special function in MS Word and choose the "Keep Text Only" option.

**2. 2. Reading****2. 2. 1. Definition of Reading**

Reading is an activity to understand, analyze and obtain information through text. As indicated by Menyuan and Leeuw (1965) as cited by Sabrina (2002), reading is a digestive-related process and has two standards educated, the first incorporates understanding, picking, recognizing, and sorting out and the second is adaptability. Reading can be said as the ability to extricate data from a text to build understanding.

**2. 2. 2. Definition of Reading Comprehension**

Reading comprehension is defined as a skill that a person has in understanding the meaning of a reading text. In addition, reading comprehension is also the key to gaining knowledge and information from written media. Smith and Johnson (1980) stated that reading comprehension is understanding in obtaining information through interaction between readers and writers.

**2. 2. 3. Type of Reading Comprehension**

According to Burns (1984; 177) in Sinambela et. al (2015) the levels of reading comprehension consist of four which include:

**a. Literal Comprehension**

Literal comprehension is to recognize the main idea stated clearly and the effect it has in detail, and sequence. This is also a need for a higher level of understanding. Understanding vocabulary, sentence meanings, and paragraph meanings are important things in this part.

**b. Interpretative Comprehension**

Interpretive understanding incorporates figuring out the lines or making ends with determined processes that are expressed straightforwardly.

**c. Critical Comprehension**

Critical comprehension is examining and comparing the material with the ideas that have been found in the material and making conclusions regarding accuracy, appropriateness, and timeliness.

**d. Creative Comprehension**

Creative comprehension is an understanding that exceeds the material presented by the author. Therefore, the reader must think hard and be able to use his imagination in reading.

**3. Research Methodology**

The research used the type of quantitative research. Quantitative research is organized and precise exploration communicated as numbers and values. The technique of analysis utilized in this research is a simple linear

regression procedure. The strategy utilized in this study expects to decide or anticipate the impact of vocabulary mastery on reading comprehension.

In this study, there are two variables namely Independent Variable: (Vocabulary Mastery) and Dependent Variable (Reading Comprehension). The population in this study is SMP Negeri 2 Pangkajene and SMP Negeri 4 Pangkajene. The sample was chosen utilizing

a simple random sampling strategy. Therefore, the sample of this research consisted of 59 students from class VIII at SMP Negeri 2 Pangkajene and 16 students from class VIII at SMP 4 Pangkajene. This study used a test consisting of a vocabulary mastery test and a reading comprehension test as the instrument. In analyzing the data, the researchers used some kinds of tests, namely the Prerequisite test, Normality test, and Linearity test.

Table 1. Classification Vocabulary mastery test and Reading Comprehension

Scores	Grade	Classifications
86-100	A	Excellent
66-85	B	Good
46-64	C	Fair
46-45	D	Poor
Under 25	E	Failed

(Depdikbud, 1990:10 As quoted by Devi 2019)

## 4. Findings

### 4. 1. Descriptive Analysis

#### *a. Vocabulary Mastery Score for SMP Negeri 2 Pangkajene Students*

Table 2. Statistics of Vocabulary Mastery Scores for Students of SMP Negeri 2 Pangkajene

Statistics	Score
Sample size	59
Ideal score	100
Lowest score	0
Highest score obtained	84
The lowest score obtained	24
Average score	56.81
Standard Deviation	1.98
Variance	3.93

Table 3. Frequency Distribution of Vocabulary Mastery Scores for Students of SMP Negeri 2 Pangkajene

Classifications	Frequency	Percentage (%)
Excellent	2	3.29
Good	16	27.12
Fair	35	59.31
Poor	6	10.17
Failed	0	0
Amount	59	100

Based on table 3 the researchers found that from 59 8<sup>th</sup>-grade students at SMP Negeri 2

Pangkajene, there were 2 students (3.29%) who were classified as excellent, 16 students

(27.12%) were classified as good, 35 students (59.31%) were classified as fair, and 6 students (10.17%) were sorted as poor. In light of the results of vocabulary mastery, it is realized that

students' vocabulary is overwhelmed by 59.31%.

*b. Reading Comprehension Score of SMA Negeri 2 Pangkajene Students*

Table 4. Frequency Distribution of Reading Comprehension Scores for Students of SMP Negeri 2 Pangkajene

Classifications	Frequency	Percentage (%)
Excellent	7	11.86
Good	20	33.90
Fair	17	28.81
Poor	11	18.64
Failed	4	6.78
Amount	59	100

Based on table 4 the researchers found that from 59 8<sup>th</sup>-grade students at SMP Negeri 2 Pangkajene, there were 7 students (11.86%) who were classified as excellent, 20 students (33.90%) were classified as good, 17 students (28.81%) were classified as fair, 11 students (18.64 %) were classified as poor, and 4 students (6.78%) were classified as failed. Given the aftereffects of reading

comprehension, it is realized that students' reading ability is overwhelmed by 33.90%.

*c. Vocabulary Mastery Scores for SMP Negeri 4 Pangkajene Students*

Overall terms, the vocabulary mastery scores of students at SMP Negeri 4 Pangkajene are as per the following.

Table 5. Statistics of Vocabulary Mastery Scores for Students of SMP Negeri 4 Pangkajene

Statistics	Score
Sample size	16
Ideal score	100
Lowest score	0
Highest score obtained	60
The lowest score obtained	20
Average score	46.75
Standard Deviation	2.00
Variance	3.99

Table 6. Frequency Distribution of Vocabulary Mastery Scores for Students of SMP Negeri 4 Pangkajene

Classifications	Frequency	Percentage (%)
Excellent	0	0
Good	0	0
Fair	11	68.75
Poor	4	25
Failed	1	6.25
Amount	16	100

Based on table 6 the researchers found that from 16 8th graders at SMP Negeri 4 Pangkajene, 11 students (68.75%) were classified as fair, 4 students (25%) were classified as poor, and 1 student (6.25%) was classified as failed. In light of the results of

vocabulary mastery, it is realized that students' vocabulary is overwhelmed by 68.75%.

*d. Reading Comprehension Score of SMP Negeri 4 Pangkajene Students*

Table 7. Statistics of Reading Comprehension Scores for Students of SMP Negeri 4 Pangkajene

Statistics	Score
Sample size	16
Ideal score	100
Lowest score	0
Highest score obtained	52
The lowest score obtained	28
Average score	38
Standard Deviation	1.94
Variance	3.78

Table 8. Frequency Distribution of Reading Comprehension Scores for Students of SMP Negeri 4 Pangkajene

Classifications	Frequency	Percentage (%)
Excellent	0	0
Good	0	0
Fair	5	31.25
Poor	11	68.75
Failed	0	0
Amount	16	100

Based on table 8 the researchers found that from 16 8th graders at SMP Negeri 4 Pangkajene, 5 students (31.25%) were categorized as fair, and 11 students (68.75%) were categorized as poor. Given the aftereffects of reading comprehension, it is realized that students' reading ability is overwhelmed by 68.75%.

*e. Vocabulary Mastery Scores for Students of SMP Negeri 2 Pangkajene and SMP Negeri 4 Pangkajene*

The scores of students' vocabulary mastery in the two schools' overall terms are as per the following.

Table 9. Statistics of Vocabulary Mastery Scores for Students of SMP Negeri 2 Pangkajene and SMP Negeri 4 Pangkajene

Statistics	Score
Sample size	75
Ideal score	100
Lowest score	0
Highest score obtained	84
The lowest score obtained	20
Average score	54.67
Standard Deviation	1.99
Variance	3.97

Table 10. Frequency Distribution of Vocabulary Mastery Scores for Students of SMP Negeri 2 Pangkajene and SMP Negeri 4 Pangkajene

Classifications	Frequency	Percentage (%)
Excellent	2	2.67
Good	16	21.33
Fair	46	61.33
Poor	10	13.33
Failed	1	1.33
Amount	75	100

Based on table 10 the researchers found that from 75 8<sup>th</sup>-grade students from SMP Negeri 2 Pangkajene and SMP Negeri 4 Pangkajene, there were 2 students (2.67%) categorized as excellent, 16 students (21.33%) categorized as good, 46 students (61.33%) categorized as fair, 10 students (13.33%) were classified as poor, and 1 student (1.33%) was sorted as failed.

Given the aftereffects of vocabulary mastery reading, we know that students' vocabulary mastery is overwhelmed by 61.33%.

*f. Reading Comprehension Scores for Students of SMP Negeri 2 Pangkajene and SMP Negeri 4 Pangkajene*

Table 11. Statistics of Reading Comprehension Scores for Students of SMP Negeri 2 Pangkajene and SMP Negeri 4 Pangkajene

Statistics	Score
Sample size	75
Ideal score	100
Lowest score	0
Highest score obtained	92
The lowest score obtained	16
Average score	52.48
Standard Deviation	2.00
Variance	4.00

Table 12. Frequency Distribution of Reading Comprehension Scores for Students of SMP Negeri 2 Pangkajene and SMP Negeri 4 Pangkajene

Classifications	Frequency	Percentage (%)
Excellent	7	9.33
Good	20	26.67
Fair	22	29.33
Poor	22	29.33
Failed	4	5.33
Amount	75	100

Based on table 12 the researchers found that from 75 8<sup>th</sup>-grade students from SMP Negeri 2 Pangkajene and SMP Negeri 4 Pangkajene

there were 7 students (9.33%) categorized as excellent, 20 students (26.67%) categorized as good, 22 students (29.33%) categorized as fair,

22 students (29.33%) were categorized as poor, and 4 students (5.33%) were sorted as failed. Given the aftereffects of reading comprehension, it is realized that students' reading ability is overwhelmed by 29.33%.

## 4. 2. Inferential Analysis

### a. Normality Test

Table 13. Overall Normality Test Result

	Tests of Normality					
	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistics	Df	Sig.	Statistics	Df	Sig.
Reading Comprehension Test	.132	59	.012	.960	59	.048
Vocabulary Mastery Test	.121	59	.030	.976	59	.290

If the significance is greater than 0.05, the data can be supposed to be typically normal so that in light of table 13 it tends to be seen that the significance value for the Reading Test is 0.132 and the Vocabulary Mastery Test is

0.121. With this significance value, it very well may be inferred that the data on the factors of vocabulary mastery and reading are typically normally distributed.

### b. Linearity Test

Table 14. Linearity Test Results

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
READING COMPREHENSION TEST * VOCABULARY MASTERY TEST	Between Groups	(Combined)	10464,492	12	872,041	3.456	.001
		Linearity	7254,696	1	7254,696	28,754	.000
		Deviation from Linearity	3209,795	11	291,800	1.157	.343
	Within Groups		11605,745	46	252.299		
	Total		22070.237	58			

When the significance obtained is less than 0.05 then the two variables can be said to have a linear relationship. From table 14, we know that the significance value got is 0.000, which is more modest than 0.05. Consequently, it is

reasoned that there is a linear relationship between the factors of vocabulary mastery and reading.

### c. Hypothesis Testing

Table 15. Simple Regression Analysis Results for SMP Negeri 2 Pangkajene

Model Summary <sup>b</sup>				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.573 <sup>a</sup>	.329	.317	16,122
a. Predictors: (Constant), VOCABULARY MASTERY				
b. Dependent Variable: READING COMPREHENSION				

  

ANOVA <sup>a</sup>						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	7254,696	1	7254,696	27,911	.000
	Residual	14815.541	57	259,922		
	Total	22070.237	58			
a. Dependent Variable: READING COMPREHENSION						
b. Predictors: (Constant), VOCABULARY MASTERY						



Table 16. Simple Regression Analysis Results for SMP Negeri 4 Pangkajene

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.238 *	.057	-.011	7.907
a. Predictors: (Constant), VOCABULARY MASTERY				

ANOVA *						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	52,763	1	52,763	.844	.374
	Residual	875,237	14	62,517		
	Total	928.000	15			
a. Dependent Variable: READING COMPREHENSION						
b. Predictors: (Constant), VOCABULARY MASTERY						

Table 17. Results of Simple Regression Analysis in General

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.573 <sup>a</sup>	.329	.317	16,122

a. Predictors: (Constant), VOCABULARY MASTERY TEST

ANOVA<sup>a</sup>

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	7254,696	1	7254,696	27,911	.000 <sup>b</sup>
	Residual	14815,541	57	259,922		
	Total	22070,237	58			

a. Dependent Variable: READING COMPREHENSION TEST

b. Predictors: (Constant), VOCABULARY MASTERY TEST

Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2,603	10,398		.250	.803
	VOCAB TEST	.947	.179	.573	5.283	.000

a. Dependent Variable: READING COMPREHENSION TEST

Based on table 17, the constant value is 2.603 and the regression coefficient value is 0.947. So that the obtained simple linear regression equation is as follows.

$$Y = 2.603 + 0.947X = 4.1$$

In this study, mastery of vocabulary has a significant effect on reading comprehension. As we can see that the significance is under 0.05, it tends to be reasoned that  $H_a$  is approved because there is an impact of vocabulary mastery on reading comprehension while  $H_0$  is rejected. Also, the discoveries of this study show that the highest level of vocabulary mastery is 84, with a reading comprehension score of 92. As a result, children with good vocabulary mastery will have a high level of comprehension. While the lowest word mastery score is 20, with a reading comprehension score of 36, students who lack word mastery will have difficulty with reading comprehension.

## 5. Discussions

Based on the data from the simple regression calculation for the ANOVA table above, it can be seen that the calculated F value is 27.911 with a significance level of  $0.000 < 0.05$ , so the regression model can be used to predict the vocabulary mastery variable or in other words, there is an influence of the vocabulary mastery variable. words (X) on reading comprehension (Y).

In addition, this is also explained in equation 4.1 which means that if the vocabulary mastery is 0 then the reading comprehension score is 2.603. If every increase in the value of vocabulary mastery is 1, then the value of reading comprehension will also increase by 0.947. Also, the significance value is smaller than 0.05 additionally presumes that  $H_0$  is dismissed, or we can say that there is an impact of the vocabulary mastery variable on students' reading comprehension.

Given the consequences of the simple linear regression analysis of the Summary Model, it tends to be seen that the extent of the correlation value (R) is 0.573 with a coefficient of determination (R Square) of 0.329 which suggests that the impact of the independent variable (vocabulary mastery) on the dependent variable (reading comprehension) was 32.9%.

These results are to the results by Ramdhan (2017) which expresses that there is a critical impact of grammar mastery on reading comprehension of narrative texts. This is proven by the securing of the value of Sig.  $0.027 < 0.05$  and  $t_h = 2.287$ . Comparable outcomes were likewise acquired by Molyaningrum (2019) whose research results showed that students who got high vocabulary quiz scores demonstrated to have high English reading comprehension scores. On the other hand, students who scored low on vocabulary tests also scored low on reading comprehension in English. This proves that vocabulary mastery affects improving students' English reading comprehension.

Tarigan (2008) explains that the nature of an individual's language abilities relies upon the amount and nature of the vocabulary he has. The more extravagant the vocabulary, the almost certain we are to be gifted at language. In light of this assessment, vocabulary is a vital perspective, since all language abilities are impacted by vocabulary mastery. Vocabulary mastery is an individual's basis for reading. Students need to have an enormous vocabulary to talk well. With an enormous vocabulary, students are supposed to have the option to comprehend what is being read. Vocabulary learning is expected to help students at SMP Negeri 2 Pangkajene and SMP Negeri 4 Pangkajene in engrossing all the information contained in the reading and making it more obvious the importance and content of the reading.

## 6. Conclusions

The conclusions of this study are:

- a. There is an impact of vocabulary on reading comprehension. This is confirmed by the significance value which shows that it is smaller than 0.05
- b. The impact of vocabulary mastery on students' reading comprehension is 32.9%, which should be visible from the coefficient of determination (R Square) of 0.329.

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