


## THE CORRELATION BETWEEN STUDENT'S VOCABULARY MASTERY AND READING COMPREHENSION

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ARTICLE INFO	ABSTRACT
<p><b>Article history:</b>                      Received: March 16,2021                      Revised: March 24,2021                      Accepted: March 26,2021                      Published: December 25,2021</p> <p><b>Keywords:</b>                      Correlation                      Vocabulary Mastery                      Reading Comprehension</p>	<p>This study aimed to investigate (1) How student performance in vocabulary mastery (2) How student performance in reading comprehension (3) Is there any correlation between student's vocabulary mastery and reading comprehension. This research used a descriptive research method. The researcher focused on the correlation between vocabulary mastery and reading comprehension at XI grade MAN Selayar. The number of sample was 24 students and used random sampling technique. The researcher used test as instrument. In addition, the data collection techniques used a questionnaire. The researcher finding was found that the vocabulary mastery of the XI grade of MAN Selayar was categorized into poor. It was indicated by the mean score (82.20) and the students reading comprehension was categorized fair. It was indicated by the mean score (84.64). Meanwhile, the results of the correlation were found with the results of 0.914. From these results it has been concluded that the correlation between vocabulary mastery and reading very strong. Because based on the product moment the correlation value calculation formula is 0.914, and that has included very strong value.</p> <p style="text-align: right;"><i>This is an open access article under the <a href="#">CC BY-SA</a> license.</i></p> <div style="text-align: right;">  </div>
<p>How to cite: Syahrani Ramadani, Saiful, &amp; Awalia Azis. (2021). The Correlation Between Students Vocabulary Mastery And Reading Comprehension. Journal of Language Testing and Assessment, Vol 1 (2), December 2021. doi: <a href="https://doi.org/10.22219/jpbi.vxiy.xxyy">https://doi.org/10.22219/jpbi.vxiy.xxyy</a></p>	
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### INTRODUCTION

In this century, English seems to be one of the main languages spoken in international communication. In Indonesia assumes that English is a foreign language. So, Indonesians find it difficult to accept it. If someone wants to learn English very well, he must know four skills. They listen, speak, read and write. Besides, he had to master the language components, such as: phonology, grammar, vocabulary, and pronunciation to support all four skills because those skills are very important.

The more vocabulary is mastered, the better the performance in all aspects of English. But that does not mean other components are ignored such as grammar and sound. Students cannot understand what they are reading without knowing what the word means. So, without mastering large vocabulary, students cannot read successfully. Vocabulary was an important component for understanding language. Students will only read or listen well if he understands words or vocabulary. Schmitt and Carthey (1997: 40) state that vocabulary is the stock of words used in a language. The more students have a stock of words used in the language, the better the performance. To understand English or communicate using English, students must read a lot of text in English because reading is very important in learning.

Vocabulary and reading cannot be separated, because both of them relate each other. By having and mastering vocabulary, we will know the meaning of vocabulary in the context. It can also help to avoid making mistake in understanding. As the students learn to read more advanced texts, they must learn the meaning of new words that are not the part of their oral vocabulary. One reason why many students find reading in some subject fields difficult because of their lack of vocabulary. Most of students if find the difficult word, they were still just continue reading in the hope that the word they read is not really important or that it's meaning will become clear later on. However, sometimes the word that passed usually as the key of the reading and understanding. The student cannot catch and grasp the idea from they were reading as well as possible. So looking up the difficult of words in dictionary is better for them. However, the skillful readers understand as he read.

## RESEARCH METHOD

In this study, researchers used quantitative descriptive to collect data because the data were expressed in numerical form, analyzed and finally concluded. The researcher took the population from class XI students of MAN Selayar and the researcher chose 25 students from the total population with a random sampling system. In this study, the researcher used the test as an instrument with 10 multiple choice questions for vocabulary mastery and 10 multiple choice questions for reading comprehension. In the data collection, procedure the researcher first explains about vocabulary and reading then gives a questioner in google form and gives about 60 minutes to work on the questions. The data obtained were analyzed use percentage analysis to determine students' ability to used reading comprehension and vocabulary in individual scores.

## RESULT AND DISCUSSION

This data was to find out how students' vocabulary mastery, how about students' reading comprehension and how the correlation between students' vocabulary mastery and their reading comprehension. The result of vocabulary mastery the researcher found that the mean score is 82.20. The result of reading comprehension the researcher found that the mean score was 84.64. In addition, the correlation the researcher found that the result was 0.914. The conclusion was correlation between students' vocabulary mastery and their reading comprehension strong enough. The data obtained were analyzed use percentage analysis to

determine students' ability to used reading comprehension and vocabulary in individual scores.

The formula as follows:

$$X = \frac{R}{T \times N} \times 100\%$$

X= Total Correct Answer

T= Number of Items

N = Number of Sample

Table 1. Conversion of Score Range

NO	SCORE	Criteria
1	75-80	Excellent
2	70-74	Good
3	55-69	Fair
4	45-54	Poor
5	40-44	Very Poor

Source: Lecture Notes (in Intan Mayasari 2012: 25)

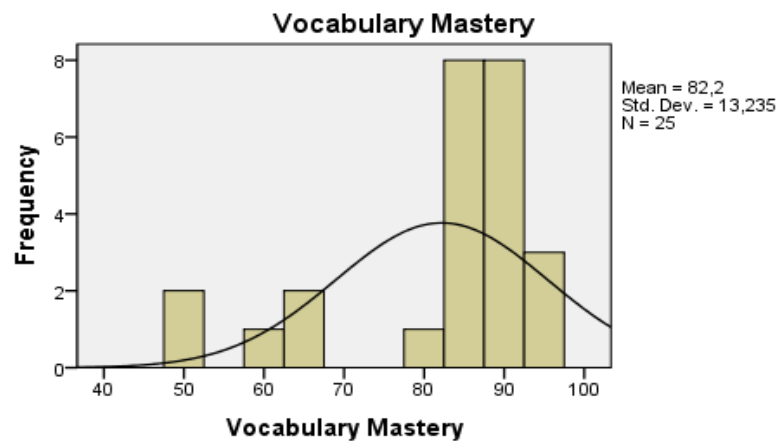
### Vocabulary Mastery

As part of the language component, vocabulary has an important role in learning English. Without mastering vocabulary, it is impossible to master English well. Students who gain more vocabulary, they can improve their English easily. Vocabulary is a sum or stick of words employed by a language, group, and individual or in relation to subject. Furthermore, Napa (1991:6) says: "vocabulary is one of the components of language and that no language exists without words. Words are signs or symbols for ideas". Based on the statement above, it can be concluded that vocabulary consists of a number of a word and component of a language. It can be said that vocabulary is all the words of language.

As a subject in the learning process, students consider English one of the most uncomfortable subjects. So that the use of learning media is very important to help, students become more interested. Saiful (2019). To know the students vocabulary mastery, the researcher had collected the data of the student's score on vocabulary test as the following table:

Table 2. The score of vocabulary mastery

No	Names	Scores
1	Student 1	85
2	Student 2	85
3	Student 3	80
4	Student 4	90
5	Student 5	65
6	Student 6	95
7	Student 7	90
8	Student 8	60
9	Student 9	90
10	Student 10	85
11	Student 11	95
12	Student 12	85
13	Student 13	50
14	Student 14	85
15	Student 15	90
16	Student 16	85
17	Student 17	90
18	Student 18	85
19	Student 19	90
20	Student 20	65
21	Student 21	85
22	Student 22	90
23	Student 23	50
24	Student 24	90
25	Student 25	95
Total		2055
Mean score of vocabulary		82.20



The student's vocabulary mastery focused on verbs. From the results of the data analysis, it was found that the mean score of vocabulary mastery of the eleventh grade students of MAN SELAYAR is 82.20.

Table 3. Descriptive Statistics of Vocabulary

Descriptive Statistics						
	N	Minimum	Maximum	Sum	Mean	Std. Deviation
Vocabulary Mastery	25	50	95	2055	82,20	13,235
Valid N (listwise)	25					

In another form of observation, the students' vocabulary mastery was shown through the frequency and presentation seen in the following table:

Table 4. The Frequency and Percentage of Students' Vocabulary Mastery

Classification	Frequency	Percentage
Good	0	0
Fair	20	80%
Poor	5	20%
Total	25	100%

The table shows that were 20 students (80%) were classified fair and 5 students (20%) were classified poor. It means that most of students were good in vocabulary mastery.

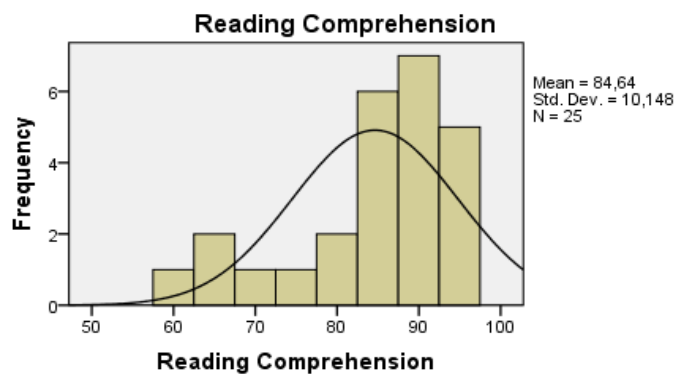
### Reading Comprehension

According to Saiful (2019) Students' reading comprehension were found some difficulties especially the meaning, they had misunderstanding also less of linguistic competence in English that affected their comprehension in reading the text. By reading, we can understand the target language. Students can improve their language with what they read from the texts, they could learn target language from reading comprehension the students has limited of vocabulary knowledge that led to not recognizing the ideas of the reading text given, even when the question was literal and factual in the test. Reading is a process of making sense of written ideas though meaningful interpretation and interaction with language. Reading comprehension is best viewed as a multifaceted process affected by several thinking and language ability. Reading is not just saying the word; Reading must be always meaning getting process. Many people can read the words in a passage perfectly, but are unable to answer the question even though the answers were directly contained in the words they pronounced.

To know the students reading comprehension, the researcher had collected the data of the student's score on vocabulary test as the following table:

Table 5. The Score of Students' Reading Comprehension

No	Names	Scores
1	Student 1	90
2	Student 2	85
3	Student 3	87
4	Student 4	95
5	Student 5	70
6	Student 6	90
7	Student 7	95
8	Student 8	65
9	Student 9	90
10	Student 10	80
11	Student 11	90
12	Student 12	88
13	Student 13	65
14	Student 14	85
15	Student 15	87
16	Student 16	95
17	Student 17	87
18	Student 18	80
19	Student 19	95
20	Student 20	75
21	Student 21	90
22	Student 22	87
23	Student 23	60
24	Student 24	95
25	Student 25	90
Total		2116
Mean score of reading comprehension		84,64



The students' reading comprehension focused on understanding the reading content in the eleventh grade MAN SELAYAR. After the researcher discussed with the teacher and the researcher gave the test to the student's, it could be concluded that the student was good at reading comprehension. The result means the value of reading comprehension the test was 84.64.

Table 6. Descriptive Statistics of Reading Comprehension

Descriptive Statistics						
	N	Minimum	Maximum	Sum	Mean	Std. Deviation
Reading Comprehension	25	60	95	2116	84,64	10,148
Valid N (listwise)	25					

Other descriptions of reading comprehension can also be seen from the frequency and percentage in the following table:

Table 7. The Frequency and Percentage of Students' Reading Comprehension

Classification	Frequency	Percentage
Good	5	20%
Fair	16	64%%
Poor	4	16%
Total	25	100%

The table shows that there were 5 students (20%) were classified good, 16 students (64%) were classified fair, and 4 students (16%) were classified poor. It means that most students were fair in reading comprehension.

Other description score of the test of vocabulary and reading comprehension

Table 8. The Score of Test of Vocabulary and Reading

No	X	Y	X <sup>2</sup>	Y <sup>2</sup>	XY
1	85	90	7225	8100	7650
2	85	85	7225	7225	7225

3	80	87	6400	7569	6960
4	90	95	8100	9025	8550
5	65	70	4225	4900	4550
6	95	90	9025	8100	8550
7	90	95	8100	9025	8550
8	60	65	3600	4225	3900
9	90	90	8100	8100	8100
10	85	80	7225	6400	6800
11	95	90	9025	8100	8550
12	85	88	7225	7744	7480
13	50	65	2500	4225	3250
14	85	85	7225	7225	7225
15	90	87	8100	7569	7830
16	85	95	7225	9025	8075
17	90	87	8100	7569	7830
18	85	80	7225	6400	6800
19	90	95	8100	9025	8550
20	65	75	4225	5625	4875
21	85	90	7225	8100	7650
22	90	87	8100	7569	7830
23	50	60	2500	3600	3000
24	90	95	8100	9025	8550
25	95	90	9025	8100	8550
$\Sigma$	2055	2116	173125	181570	176880



## The Correlation Between Students' Vocabulary Mastery and Their Reading Comprehension

Vocabulary plays an important role in learning to read. As novice readers, children use the words they hear to make sense of the words they see on the print. Consider, for example, what happens when a novice reader gets to dig up words in a book. As he begins to recognize the sounds represented by the letters d, l, g, the reader learns that the sound is a very familiar word that he has heard and pronounced many times. Beginner readers will find it more difficult to read words that are not already part of their spoken vocabulary. Therefore reading vocabulary is very important and related to one another.

The main goal of this study was to find the relationship between vocabulary mastery and reading comprehension in class XI MAN SELAYAR. To find the relationship between the two variables, the researcher used the person product moment formula to calculate the data.

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

r = Correlation Coefficient

n = Number of the Sample

x = Vocabulary

y = Reading Comprehension Score

Table 9. The degree of Correlation coefficients

Coefficient Interval	Degree of Correlation
0.00-0.199	Very Weak
0.20 - 0.399	Weak
0.40 - 0.599	Fair
0.60 - 0.799	Strong
0.80- 1.000	Very Strong

Source: Sugiyono, 2001 (in Intan Mayasari 2012: 26)

Correlation coefficients whose magnitudes were between 0.80 and 1.000 indicate variables which can be considered very highly correlated. Correlation coefficients whose magnitudes were between 0.60 and 0.799 indicate variables which can be considered highly correlated. Correlation coefficients whose magnitudes were between 0.40 and 0.599 indicate variables which can be considered moderately correlated. Correlation coefficients whose magnitudes are between 0.20 and 0.399 indicate variable which has a low correlation. Correlation coefficients whose magnitudes were less than 0.399 have little if any (linear) correlation.

There are two variables, namely vocabulary mastery as X and reading comprehension as Y. Based on the data from vocabulary mastery and reading comprehension. The index level of the relationship between variable X and variable Y was present in the table as follow:

**Table 10.** The Correlation between Students' Vocabulary Mastery and Their Reading Comprehension

		Vocabulary Mastery (X)	Reading Comprehension (Y)
Vocabulary Mastery	Pearson Correlation	1	,914**
	Sig. (2-tailed)		,000
	N	25	25
Reading Comprehension	Pearson Correlation	,914**	1
	Sig. (2-tailed)	,000	
	N	25	25

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

if  $r(\text{counts}) > r(\text{table})$  then  $H_0$  is rejected, its mean that the two variables has a relationship  
 if  $r(\text{counts}) < r(\text{table})$  then  $h_0$  is accepted, its mean that the two variables has no relationship.  
 then  $h_0$  is rejected, meaning that there is a potential relationship between the x and y variables.

$$r_{xy} = \frac{N \cdot \sum XY - (\sum X)(\sum Y)}{\sqrt{[N \cdot \sum X^2 - (\sum X)^2][N \cdot \sum Y^2 - (\sum Y)^2]}}$$

$$r_{xy} = \frac{25 \cdot 176880 - (2055)(2116)}{\sqrt{[25 \cdot 173125 - (2055)^2][25 \cdot 181570 - (2116)^2]}}$$

$$r_{xy} = \frac{4422000 - 4348380}{\sqrt{[4328125 - 4223025][4539250 - 4477456]}}$$

$$r_{xy} = \frac{73620}{\sqrt{[105100][61794]}}$$

$$r_{xy} = \frac{73620}{\sqrt{6494549400}}$$

$$r_{xy} = \frac{73620}{80588,7672}$$

$$r_{xy} = 0,913526817$$

$$r_{xy} = 0,914$$

Based on the table above, the researcher found two aspects, namely students' vocabulary and reading have the same average grade level vocabulary and reading. In mastering vocabulary, students get a value of 82.20 and in students' reading comprehension got a score of 84.64. You could say students their vocabulary mastery and reading comprehension were quite good. Interpretation of correlation analysis states a correlation between students' vocabulary mastery and their reading comprehension was sufficient good. That is 0.914 which lies between 0.80- 1.000. It means that relationship very strong. Because  $r = 0.914$ ,  $H_0$  was rejected and  $H_a$  was accepted. It means there was a relationship between vocabulary mastery and their reading comprehension of second grade students of MAN SELAYAR.

## CONCLUSION

The conclusion of this study deals with The Correlation between Students Vocabulary Mastery and Reading Comprehension at the eleventh grade of MAN Selayar.

1. The students mean score of vocabulary mastery was 82.20 in which the highest score was 95 and the lowest score was 50. It means that student's vocabulary mastery was categorized fair.
2. The students mean score in reading comprehension is 84.64 in which the highest score was 95 and the lowest score was 60. It means that the students speaking ability is categorized fair.
3. The results of the calculation of the hypothesis test, the R-value is 0.914 and r-table has 0.3916. So,  $0.914 > 0.3916$  then  $H_0$  was rejected, which means that between the variable vocabulary mastery (X) and reading comprehension (Y) there was a positive relationship.

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