



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

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### Abstract

*This research to find out the correlation between students' comprehension of reading and their vocabulary mastery. This study uses correlational research. The population of this study were second-grade students of SMA Islam Brawijaya in the academic year 2023/2024. The sample consisted of 30 students. The main problem in this study was to determine whether there was a relationship between students' vocabulary mastery and their reading comprehension skills in learning English. The techniques used to obtain data are: first, collecting data from students' vocabulary tests and reading comprehension tests; second, calculating and classifying students' vocabulary mastery tests and students' reading comprehension; third, analyzing students' vocabulary scores and students' reading comprehension; finally, drawing conclusions based on the data. The results of the analysis show that there is a significant correlation between students' vocabulary mastery and their ability to understand a reading. This is proven because the average vocabulary mastery of students is 76.66, In the vocabulary table, the level of vocabulary mastery scores of students get a good score. Meanwhile, the score of students' reading comprehension is 84.66, In the table of scores of students' reading comprehension levels, students get a good score.*

**Keywords:** *vocabulary, vocabulary mastery, reading comprehension, correlation, narrative text*

## A. INTRODUCTION

Reading is a productive activity to do, bearing in mind that reading is an important activity to carry out in human life, there are many benefits to be gained from reading activities. In this case, reading aptitude refers to the capacity to comprehend a text's contents. Since comprehension of reading is essential to learning at school, reading comprehension is a critical skill that every student needs to possess. However, in reality, When compared to other nations, Indonesian pupils' reading proficiency is still relatively low.

The vocabulary mastery factor is one linguistic component that is closely related to reading comprehension ability and frequently becomes a barrier. Mastery of vocabulary is crucial for developing language skills, including reading comprehension. The reading abilities that are being discussed are reading comprehension abilities, or the ability to make sense of a text.

Burn, et al (Rahim, 2011) explained that the ability to read is something vital in an educated society. Not only may reading alter one's perspective, but it can also fundamentally alter one's life. Thus, reading should be ingrained in children from a young age. It is beneficial if we read a book for at least one hour each day. Students' ability level increases with the frequency of reading exercises.

According to (Tarigan, 2008), understanding literary standards or conventions, critical analyses, written drama, and fiction patterns is the goal of reading comprehension. Thus, in addition to comprehending the reading's content, the reader is also able to analyze it and offer an evaluation by connecting it to prior knowledge and experience in order to develop a deeper understanding. The ability of kids to understand vocabulary is intimately linked to their reading comprehension capabilities.

The more our vocabulary, the higher our probability of being proficient speakers. This implies that a person's ability to use language is based on how well-versed in vocabulary they are. (Nurgiyantoro, n.d.) distinguishes between two types of vocabulary mastery: receptive mastery and productive mastery, which refer to the comprehension and application of words. Writing and speaking tasks demand the use of vocabulary, whereas comprehension abilities are needed for reading and listening activities.

The only thing that mattered when learning a foreign language was vocabulary. Anyone with a small vocabulary will also have a small comprehension in writing, speaking, listening, and reading. (Widyaningsih, n.d.) asserted that using words can enhance your reading, writing, communication, and thinking skills if you already have an interest in words (vocabulary). We may infer from the aforementioned remark that vocabulary is the fundamental skill that learners of English need to succeed in mastering.

Considering the observations the researcher made prior to starting the study, it appears that most of the students at Brawijaya Islamic High School have not been able to find synonyms and antonyms in a text. In fact, synonyms and antonyms are indicators of vocabulary mastery. . Students still struggle to identify a paragraph's primary point when reading aloud. Furthermore, children continue to struggle with drawing inferences about the reading's content. When students work on practice questions, it is evident that they prioritize working on other questions above ones that test their comprehension of the reading material. This statistic suggests that one of the things influencing a person's reading comprehension skills is their command of vocabulary. The level of students' vocabulary mastery will likewise affect their IQ. An extensive vocabulary is indicative of a high level of intelligence in students.

The researcher want to investigate how vocabulary expertise affects students' reading comprehension abilities based on the description provided above "The Correlation Between Students' Vocabulary Mastery and Their Reading Comprehension". With this research, it is hoped that vocabulary mastery and reading comprehension skills

can improved in order to improve learning. Because with high vocabulary mastery students are expected to enhance high reading comprehension skills. Because reading comprehension is a very important language skill among the other three language skills.

## **B. THEORETICAL OVERVIEW**

### **Reading Comprehension & Vocabulary Mastery**

As for reading comprehension, (Somadyo, 2011) states that it is attained via a process of matching or interacting between the reader's schemata and the concepts, understandings, and facts offered in the reading material. As a result, in addition to the reading's content, understanding of a reading also depends on the reader's prior knowledge. In addition to Throughout this process, the reader actively constructs his understanding.

Vocabulary mastery has a significant role for every person. In language activities, vocabulary mastery is very influences on a person's ability to understand something. Someone who has mastery of a bit of vocabulary will find it difficult to understand something (Ratih, 2011). Thus, it is anticipated that vocabulary mastery will significantly aid students in taking in all of the information presented in the reading, allowing them to comprehend more and find it more straightforward to decipher the meaning and content of reading. To be able to carry out communication activities with language, it is necessary to master vocabulary in sufficient quantities.

According to (Djiwandono, 2011) there are two types of vocabulary mastery: passive-receptive mastery and active-productive mastery. Mastery that is both active and productive. Passive-receptive vocabulary mastery is the ability to comprehend words without necessarily being able to use them independently, or simply being able to identify meanings when they are used by others or presented for choosing. On the other hand, active-productive mastery refers to vocabulary that goes beyond simply knowing the meaning of words that are read or heard; it involves the ability to employ words independently and proactively to convey one's ideas in conversation.

## **C. RESEARCH METHODS**

The research approach used in this research is a quantitative approach using causal relationship correlation research. (Sugiyono, 2015, p. 59) it is stated that a causal relationship is a relationship that is cause and effect. Thus, independent variables (variables that influence) and dependent variables (variables that are impacted) are present in this study. The purpose of this study is to ascertain how reading comprehension ability is impacted by vocabulary acquisition.

The population of this study was Brawijaya Islamic high school students for the 2023/2024 academic year, totaling 104 people. The population that the author took was 104 students. Although only thirty of the 32 students who were enrolled in the exam took it, the researcher actually used the full population as a research sample. To collect the sample shown above, complete sampling was used. Total sampling is a problem-based sampling method (based on specified objectives). In this research, researchers used objective tests as data collection instruments. This test is used to obtain scores of vocabulary mastery and reading comprehension. Vocabulary test there are 20 multiple-choice questions on the vocabulary test, each with four possible answers: A, B, C, and D. Reading comprehension test There are 20 multiple-choice questions on the reading comprehension test, each with four possible answers: A, B, C, and D.

Data analysis procedures are the next phase in this research when the data is completed. In the academic year 2023–2024, second-grade pupils at Brawijaya Mojokerto Islamic Senior High School took tests administered by the study's authors. This exam focuses on English vocabulary, and reading comprehension assessments. The writer employs the test technique because she is interested in finding the relationship between the two test kinds, vocabulary and reading comprehension. There are two sections to this test: the first has 20 vocabulary items. There are 20 items in the second category, which is reading comprehension.

In data analysis, of course, the author also uses the prerequisite test analysis technique. This technique has two types: the first is the normality test, and the second is the linearity test. Each type has its own purpose or function in this research. The author also uses hypothesis testing in this research. Hypothesis testing has one type, which is Simple Linear Regression Analysis. Decision-making in simple linear regression analysis includes several aspects, such as correlation analysis, the Coefficient of Determination, and Simple Regression Equations.

#### D. RESULTS AND DISCUSSION

Students took a test administered by the researcher to determine their vocabulary mastery scores. There were ten items in the multiple choice test and 10 items match. The test was conducted to the classes XI on Monday, September 4th 2023. Thirty students registered for the test. Subsequently, the investigator awarded the scores as indicated in table 4.1.

**Table 4.1**

**The result of Vocabulary Test Score**

NO	CODE	VOCABULARY TEXT (X)	X <sup>2</sup>
1	A1	70	4900
2	A2	95	9025
3	A3	100	10000
4	A4	90	8100
5	A5	70	4900
6	A6	95	9025
7	A7	90	8100
8	A8	85	7225
9	A9	70	4900
10	A10	100	10000
11	A11	95	9025
12	A12	95	9025
13	A13	85	7225
14	A14	75	5625
15	A15	100	10000
16	A16	60	3600
17	A17	80	6400
18	A18	75	5625
19	A19	70	4900
20	A20	80	6400
21	A21	75	5625
22	A22	65	4225
23	A23	70	4900
24	A24	75	5625
25	A25	80	6400
26	A26	80	6400
27	A27	70	4900
28	A28	75	5625
29	A29	80	6400
30	A30	75	5625
	SUM	2300	177800
	Highest Score	90	
	Lowest Score	65	

Students took exams designed by researchers to record their language mastery results. There are twenty questions in the multiple choice test. The exam took place on Monday, September 4, 2023, in class XI. Thirty people took the test. The researcher then provided a score, which is detailed in table 4.4.

**Table 4.4**  
**The Result of the Reading Test Score**

NO	CODE	READING TEST (Y)	Y <sup>2</sup>
1	A1	70	4900
2	A2	95	9025
3	A3	100	10000
4	A4	90	8100
5	A5	70	4900
6	A6	95	9025
7	A7	90	8100
8	A8	85	7225
9	A9	70	4900
10	A10	100	10000
11	A11	95	9025
12	A12	95	9025
13	A13	85	7225
14	A14	5	5625
15	A15	100	10000
16	A16	20	400
17	A17	90	8100
18	A18	75	5625
19	A19	90	8100
20	A20	100	10000
21	A21	75	5625
22	A22	85	7225
23	A23	80	6400
24	A24	80	6400
25	A25	100	10000
26	A26	95	9025
27	A27	80	6400
28	A28	90	8100
29	A29	85	7225
30	A30	80	6400
	<b>SUM</b>	<b>2540</b>	<b>222100</b>
	<b>Highest Score</b>	<b>100</b>	
	<b>Lowest Score</b>	<b>20</b>	

It is used to determine whether or not both groups have a normal distribution and how normal the data that will be evaluated is. As a result, SPSS 29 was utilized in the normalcy test to determine whether the data was normal. Which the following way to view it:

**Table 4.7 Normality Test**  
**One-Sample Kolmogorov-Smirnov Test**

N			30
Normal Parameters <sup>a,b</sup>	Mean		,0000000
	Std. Deviation		7,87496579
Most Extreme	Absolute		,098
	Positive		,091
	Negative		-,098
Tes Statistic			,098
Asymp. Sig. (2-tailed) <sup>c</sup>			,200 <sup>d</sup>
Monte Carlo Sig. (2-tailed) <sup>e</sup>	Sig.		,636
	99% Confidence Interval	Lower Bound	,623
		Upper Bound	,648

## E. DISCUSSION

The data description suggests that there was a favorable relationship between reading comprehension and vocabulary competence. The computed correlation coefficient score is 0.875, falling between 0.80 and 0.100. The link is therefore rated as extremely high.

The computation's outcome reveals that the students' average vocabulary mastery score was 76.66. Additionally, the average reading comprehension score of the pupils was 84.66. The current study's results demonstrate a positive association between reading comprehension and vocabulary mastery, with a correlation coefficient of 0.875 between the two variables based on SPSS 29. It indicates that there is a strong association between reading comprehension and vocabulary knowledge according to the current study's findings.

These results demonstrated a positive relationship between reading comprehension and vocabulary mastery. Certain ideas suggest that mastery of language is the most crucial component of reading comprehension. According to Hornby (Chapter II, p. 13), in order for pupils to fully comprehend the texts they are reading, they must actively engage with the texts and require greater attention from the reader. According to (Ratih, 2011), on page 10 of chapter II, vocabulary is the building block of language; language cannot exist without it. Prior to become proficient in all four areas writing, speaking, listening, and reading—students must acquire the vocabulary, grammar, and phonetics of the English language.

## F. CONCLUSION

The purpose of this study was to find out if the reading comprehension and vocabulary mastery of Brawijaya Islamic High School, Mojokerto City, class XI pupils significantly correlated or not. The researcher draws the following conclusions from the material covered in the previous chapters:

1. Class XI students at the Brawijaya Islamic High School in Mojokerto City have an average vocabulary mastery score of 76.66. It falls within the "Good" category. Obtained by dividing the overall score by the number of pupils.
2. The average reading comprehension score for class XI students at the Brawijaya Islamic High School, Mojokerto City is 84.66. It falls within the "Good" category.
3. There is a positive correlation between vocabulary knowledge and reading comprehension of XI students at the Brawijaya Islamic High School, Mojokerto City. The data shows that the tcount value (0.786) is greater than t-table (0.3494). It has been demonstrated that the claim that there is no link between vocabulary knowledge and reading comprehension ( $H_0$ ) and the assertion that  $H_a$  is true is rejected in favor of the correlation. The correlation coefficient between reading comprehension and vocabulary knowledge indicates a slight positive relationship between the two variables. This suggests that improving vocabulary will lead to an improvement in reading comprehension. On the other hand, reading comprehension of narrative texts will decrease along with decreasing vocabulary knowledge.

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