# THE CORRELATION BETWEEN VOCABULARY MASTERY AND READING COMPREHENSION OF THE ELEVENTH GRADE STUDENTS OF SMA NEGERI 1 INDRALAYA 

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#### Abstract

Vocabulary mastery is an individual's skill in using words of a language. Reading comprehension is the act of understanding of a text. Reader can understand the meaning, main idea, topic and summary of the text by mastering vocabulary. The objectives of this study were to find out whether or not there was a significant correlation between vocabulary mastery and reading comprehension of the eleventh grade students of SMA Negeri 1 Indralaya and to find out in how much the vocabulary mastery contributes toward reading comprehension of the eleventh grade students. This study used a correlational research design. This study involved 65 students as the sample chosen by using cluster random sampling technique. The data were collected by vocabulary mastery test and reading comprehension test. The techniques for analyzing the data were correlational analysis and regression analysis. The results of study found that there was a significant correlation between vocabulary mastery and reading comprehension of the eleventh-grade students since $p$-value ( 0.049 ) was lower than 0.05 . Then, the $r_{\text {value }}$ was 0.245 that showed as weak or low correlation between vocabulary mastery and reading comprehension of the eleventh grade Students. Vocabulary mastery also gave contribution to reading comprehension as much as $6 \%$.


Keywords: vocabulary mastery, reading comprehension, explanation text

## HUBUNGAN ANTARA PENGUASAAN KOSA KATA DAN PEMAHAMAN MEMBACA SISWA KELAS SEBELAS SMA NEGERI 1 INDRALAYA


#### Abstract

ABSTRAK: Penguasaan kosakata adalah keterampilan individu dalam menggunakan kata-kata. Pemahaman membaca adalah tindakan memahami suatu teks. Pembaca dapat memahami makna, ide utama, topik dan ringkasan teks dengan menguasai kosa kata. Tujuan dari penelitian ini adalah untuk mengetahui ada atau tidaknya hubungan yang signifikan antara penguasaan kosakata dan pemahaman bacaan siswa kelas sebelas di SMA Negeri 1 Indralaya dan untuk mengetahui seberapa besar penguasaan kosakata berkontribusi terhadap pemahaman bacaan siswa kelas sebelas SMA Negeri 1 Indralaya. Penelitian ini melibatkan 65 siswa sebagai sampel, dipilih dengan menggunakan cluster random sampling. Data dikumpulkan dengan tes penguasaan kosakata dan tes membaca pemahaman. Teknik menganalisis data adalah analisis korelasional dan regresi. Hasil penelitian menunjukkan adanya korelasi yang signifikan antara penguasaan kosakata dan pemahaman membaca siswa karena nilai $p(0,049)$ lebih rendah dari 0,05 . Kemudian, nilainya adalah 0,245 menunjukkan korelasi yang lemah antara penguasaan kosakata dan pemahaman membaca siswa. Penguasaan kosakata memberi kontribusi pada pemahaman membaca sebanyak $6 \%$.


Kata Kunci: Penguasaan kosa kata, pemahaman membaca, teks explanation

## INTRODUCTION

Learning English becomes a necessity because it is considered as international language. Therefore, English language is used as an official language almost all around the world. According to Nunan (2010) as the foreign language, English is an important language in the world. As different people from different parts of the world speak various languages, English has become the global language as it the language spoken by the people of all the countries in the world. In Indonesia, English is learned and used as a foreign language (Lie, 2007). It means that in indonesia, first language is Indonesian language and English is foreign language.

In Indonesian, English language is neither the first nor the second language, it is taught or learned as the foreign language for practical necessary uses of communication. However, people using English for communication especially between two speakers who have different native language. English is taught from kindergarten level up to university level. Therefore, English is very important to be mastered by all people who want to be success in life.

Vocabulary is one of the aspects in English that should be mastered by the students in learning English. Mastering vocabulary requires the students to comprehend the text. In other words, lack of vocabulary in learning English will cause difficulties in comprehending the text (Willis, 2008).

Reading is one of the important language skills. By reading, people may get a lot of information. The more he/she reads, the more information he/she will get. As Kimberly (2014) said that comprehension is a process in which information from the text and the knowledge possessed by the reader act together to construct meaning. In other words, reading comprehension is incredibly complex and multifaceted. Because of this, readers do not develop the ability to comprehend texts quickly, easily or independently. Reading comprehension strategies must be taught over an extended period of time by parents and teachers who have knowledge and experience using it.

Based on preliminary study and interview to the teacher of English at SMA N 1 Indralaya on 13 November 2019, it showed that the students faced difficulties in reading comprehension and had lack of vocabulary mastery. It was because some students did not know how to identify the main idea of the text and they were not able to identify meaning of words. It could be seen from the result of the students' exam.

Reading comprehension and vocabulary mastery have a strong relationship. It is in line with Sedita (2005) who states that vocabulary knowledge is crucial in reading comprehension and determining how well students are in comprehending the texts. It can make students more focused on keywords or ideas and to expand vocabulary. Nation (2008) classifies vocabulary into four categories based on how frequently it occurs in the language (its frequency) and how widely it occurs (its range). The four categories of vocabulary are namely high frequency words, academic words, technical words, and low frequency words. Therefore, this vocabulary is essentially useful for learners wishing to study at tertiary level and to understand a variety of academic texts. Hiebert and Kamil (2005) say that students need to know about words, not simply acquire new words, if they are to be successful in understanding unfamiliar vocabulary in their reading. The researcher used academic words and technical words.

In the regard to this matter, this study attempts to find out the correlation between vocabulary mastery and reading comprehension. There were two objectives of this study as follows:

1. To find out whether or not there was any significant correlation between vocabulary mastery and reading comprehension of the eleventh grade students of SMA Negeri 1 Indralaya.
2. To find out how much the vocabulary mastery contributed toward reading comprehension of the eleventh grade students of SMA Negeri 1 Indralaya.

## METHODOLOGY

Quantitative study is used in this study since this research focuses on analyzing the data through systematic process by using certain computation. This study used correlational study, which attempts to measure the relationship between two variables of vocabulary mastery and reading comprehension.

The procedure would be that, first; the researcher identified problems of the study. Second, she identified students' vocabulary mastery and reading comprehension by using vocabulary mastery test and reading comprehension test. Third, the researcher found the correlation between variables through SPSS based on the results of the vocabulary mastery test and reading comprehension test. Fourth, she found the vocabulary mastery gave contribution to reading comprehension. Last, explanation and interpretation of the results would be discussed.

In this study, the independent variable was vocabulary mastery ( X ) and the dependent variable was reading comprehension ( Y ). The population of this study was the eleventh graders of SMA Negeri 1 Indralaya. The total population was 193 students. In selecting the sample, the researcher decided the sample because the population was distributed in groups or classes randomly selected and they are have similar characteristic: they have same syllabus, the same time allocation, and the same materials. The samples of investigation were 65 students from XI.IPA 3 and XI.IPA 4.

The data was gathered by administering reading comprehension test and vocabulary test. The reading comprehension test consisted of 30 items in the form of multiple choices. The vocabulary mastery test consisted of 38 items in the form of 27 items in the form of gap fill and 11 items in the form multiple choice.

The researchers conducted validiy test, reliability test, normality tets, correlational analysis, and regression analysis. Based on the result of the try out vocabulary mastery test, it was found that twelve items of the instrument were not valid. Those items were the item $1,26,28,32,34,35,37,38,43,44,45$, and 46 . Therefore, those items were deleted. And for the valid instrument, there were thirty eight items. Those items were the item $2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,27$, $29,30,31,33,36,39,40,41,42,47,48,49$, and 50 .

Reliability is the degree of consistency of a measure. A test will be reliable when it gives the same repeated result under the same conditions (Shuttleworth \& Wilson, 2009). In this study, the researcher used Cronbach's Alpha. Based on the result of reliability test, it was found that the coefficient of Cronbach Alpha was 0.933. It indicated that the test was categorized as very high reliable.

Next, based on the result of the try out reading comprehension test, it was found that twenty items of the instrument were not valid. Those items were the item 1, 2, 4, 7, $12,17,18,19,20,23,24,27,28,30,36,37,41,44,47$, and 50 . Therefore, those items were deleted. And for the valid instrument, there were thirty items of the instrument. Those items were the item $3,5,6,8,9,10,11,13,14,15,16,21,22,25,26,29,31,32$,
$33,34,35,38,39,40,42,43,45,46,48$, and 49 . The result of reliability test, it was found that the coefficient of Cronbach Alpha was 0.846 . It indicated that the test was categorized as very high reliable.

It was found out that the significant coefficient (sig. 2-tailed) of Kolmogorov Smirnov for vocabulary mastery test was 0.053 and for reading comprehension test was 0.280 . Then, they were calculated to find out whether there was significant a correlation between reading comprehension and vocabulary mastery. The instruments were vocabulary mastery test and reading comprehension test.

## FINDINGS AND DISCUSSION

1. Findings

Correlational analysis used to find out the correlation between students vocabulary mastery and reading comprehension. After researchers found out the correlation between vocabulary mastery and reading comprehension and regression analysis was used to know if the vocabulary mastery contributed toward reading comprehension of the eleventh grade students of SMA Negeri 1 Indralaya.
1.1 The Analysis Frequency of Vocabulary and Reading Comprehension

Based on vocabulary mastery test, there were 3 students ( $4.62 \%$ ) in very good category, 17 students ( $26.15 \%$ ) were in good category, 19 students ( $29.23 \%$ ) were average category, and 26 students ( $40 \%$ ) were in poor category. The score distribution of vocabulary mastery is presented in Table 1.

Table 1. Score Distribution of Vocabulary Mastery

| Variables | Score Interval | Categories | Frequency | Percentage |
| :---: | :---: | :---: | :---: | :---: |
|  | $90-100$ | Very Good | 3 | $4.62 \%$ |
| Vocabulary | $81-89$ | Good | 17 | $26.15 \%$ |
| Mastery | $72-80$ | Average | 19 | $29.23 \%$ |
|  | $<72$ | Poor | 26 | $40 \%$ |
| Total (N) |  |  | 65 | $100 \%$ |

Meanwhile, in the score distribution of reading comprehension test, there were 4 students ( $6.15 \%$ ) classified in very good category, 2 students ( $3.08 \%$ ) were classified in good category, 7 students ( $10.77 \%$ ) were in average category, and 52 students ( $80 \%$ ) were in poor category.

Table 2. Score Distribution of Reading Comprehension

| Variables | Score <br> Interval | Categories | Frequency | Percentage |
| :---: | :---: | :---: | :---: | :---: |
| Reading | $90-100$ | Very Good | 4 | $6.15 \%$ |
| Comprehension | $81-89$ | Good | 2 | $3.08 \%$ |
|  | $72-80$ | Average | 7 | $10.77 \%$ |
|  | $<72$ | Poor | 52 | $80 \%$ |
| Total |  |  | 65 | $100 \%$ |

### 1.2 Correlational Analysis

Based on table 3, the researchers found out that $r$ - value was 0.245 with significant coefficient ( $p$-value) was 0.049 which was lower than 0.05 . It could be concluded that there was a significance correlation between vocabulary mastery and reading comprehension. Furthermore, the Pearson Correlation was 0.245 , it was indicated that the
correlation between vocabulary mastery and reading comprehension was in the low level that can be shown in table 3 .

Table 3. The Result of correlation Analysis of Vocabulary Mastery and Reading Comprehension

| Variables | Pearson Correlation | Sig (2-tailed) | N |
| :---: | :---: | :---: | :---: |
| Vocabulary Mastery | 0.245 | 0.049 | 65 |
| Reading Comprehension |  |  |  |

1.3 Regression Analysis

Based on table 4, it was found out that vocabulary mastery contributed toward reading comprehension. The value of regression showed that the coefficient influence vocabulary mastery and reading comprehension was 0.060 . It means that contribution of vocabulary mastery to reading comprehension was $6 \%$.

Table 4. Regression Analysis

| Model | R | Square | Adjusted R Square | Std. Error of the Estimate |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | .245 | .060 | 045 | 16.59633 |

## 2. Discussion

Based on the findings of the study, there were some interpretations that could be drawn. First, the vocabulary mastery influences students' reading comprehension and students who have higher vocabulary mastery tend to have better reading comprehension and vice versa. It could be seen in the data shown that there were some students who got very good and good score.

Therefore, there were some students who got average and poor score in vocabulary mastery test and reading comprehension test. Almost all of the students score were in average category in vocabulary mastery and reading comprehension. It is in line with the research done by Ratnawati (2006) her research showed that the improvement of students' vocabulary mastery had been followed by improvement of students reading comprehension. In addition, Herlina (2017) also stated that there was a correlation between vocabulary mastery and learning motivation toward reading comprehension. The increase of vocabulary mastery and learning motivation were followed by the improvement of reading comprehension. It was also assumed that students' reading comprehension could influence students' vocabulary mastery and students' learning motivation.

Second, based on the result of correlation between vocabulary mastery and reading comprehension, it was found that there was a positive correlation between vocabulary mastery and reading comprehension which was categorized low correlation. Last, vocabulary mastery gave significant contribution to reading comprehension. The value of regression showed that the coefficient influence vocabulary mastery and reading comprehension was 0.060 . It means that contribution of vocabulary mastery to reading comprehension was $6 \%$. In other words, the students who achieved high score in vocabulary mastery also achieved high score in reading comprehension, and the students who got low score in reading comprehension also got low score in vocabulary mastery.

## CONCLUSION

Based on the results of the research conducted at the Eleventh Grade Students of SMA Negeri 1 Indralaya, it could be concluded that there was significant correlation between vocabulary mastery and reading comprehension of the eleventh grade students at SMA Negeri 1 Indralaya since the $p$-value ( 0.049 ) was lower than 0.05 . The $r_{\text {value }}$ was 0.245 , it showed that there was weak or low correlation between vocabulary mastery and reading comprehension of the eleventh grade students at SMA Negeri 1 Indralaya. The regression showed that the coefficient influence vocabulary mastery and reading comprehension was 0.060 . It means that contribution of vocabulary mastery to reading comprehension was $6 \%$.

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