# THE CORRELATION BETWEEN VOCABULARY MASTERY AND STUDENTS' READING COMPREHENSION 

I Nyoman Satria Indra Pebriawan, Basturi Hasan, Sudirman<br>Pebriawan94@gmail.com


#### Abstract

Penelitian ini bertujuan untuk mengetahui apakah ada hubungan antara penguasaan kosakata dan kemampuan membaca siswa. Populasi dalam studi ini adalah kelas dua MIA 3 siswa SMAN 1 Sidomulyo. Ada 30 siswa sebagai sampel. Instrumen yang digunakan adalah tes kosakata dan tes membaca. Hasil perhitungan SPSS menunjukkan persentase rata-rata kemampuan membaca adalah $63,4 \%$ dan persentase rata-rata penguasaan kosakata adalah $60 \%$, dan hasil perhitungan SPSS untuk korelasinya adalah 0,989 . Koefisien korelasi lebih tinggi bahwa nilai kritis tabel ( 0,989 > 0,32 ). Analisis statistik menunjukkan korelasi antara penguasaan kosakata siswa dan membaca adalah signifikan ( $\mathrm{p}<0,01 ; \mathrm{p}=0,000$ ). Jadi, hipotesis nol ( H 0 ) ditolak dan hipotesis alternatif (H1) diterima. Ini berarti ada korelasi antara penguasaan kosakata dan pemahaman membaca siswa..


This present study was aimed to find out whether there was any correlation between students' vocabulary mastery and students' reading comprehension. The population was the second grade of MIA 3 students of SMAN 1 Sidomulyo. There were 30 students as the sample. The instruments were vocabulary test and reading test. The result of SPSS calculation showed the average percentage of reading ability was $63.4 \%$ and the average percentage of vocabulary mastery was $60 \%$, and the result of correlation was 0.989 . The coefficient correlation was higher that the critical value of table (.989>.32). The statistical analysis showed that the correlation was significant ( $\mathrm{p}<.01 ; \mathrm{p}=.000$ ). Therefore, the null hypothesis (H0) is rejected and the alternative hypothesis (H1) is accepted.

Keywords : correlation, vocabulary mastery, reading comprehension

## INTRODUCTION

Basically, there are four language skills to be mastered, i.e. listening, speaking, reading, and writing skills. Specifically, reading skill in SMA English curriculum has important role because it will be important for the students to continue to the next levels. Reading forces the reader's brain cells to work on a regular basis to keep the development of the reader. Moreover, by reading someone may get wider information than listening, for example someone who reads a newspaper will get more information than someone who watches news on television. In relation to the definitions of reading, Edhita G. Simanjuntak (1989:14) defines that reading are the meaningful interpretation of printed or written verbal symbols. This is so as supported by Willis (2008) who states that by reading, someone can find the specific information he needs specific information. In the case of helping the students to understand the text without understanding all the vocabulary items available in the text is by finding key words.

Naturally, vocabulary mastery in most cases can help students to learn other language skills, e.g., listening, speaking, reading and writing skills. This stands to reason for vocabulary mastery was used to know the meaning of the text. To get the meaning of the text and to read easily, the students should know the structure and vocabulary items. In learning vocabulary it does not mean that the learners only memorize an amount of the words, but they also should be able to use them for communication and how they are contracted using language as well.

Vocabulary is one of the aspects in English language 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.

Likewise Ali (2010) analyses the correlation between vocabulary mastery and the reading comprehension done in university students of the second semester of the English Department, the faculty of Tarbiyah and Teacher Training Syarif Hidayatullah, State Islamic University Jakarta. He found that there was significant correlation between students' vocabulary mastery and their reading comprehension. By having vocabulary, it significantly affects the comprehension of students' reading comprehension.

Therefore, this research is proposed to find out the correlation between students' vocabulary mastery and students' reading comprehension at $2^{\text {nd }}$ grade of SMAN 1 Sidomulyo in academic year 2014/2015.

## METHOD

This study used quantitative because it was focused on the product (result of the test). In this research there was no control and no treatment to the subject. Hatch and Farhady (1982: 26) state that ex post facto design is often used when the study does not have control over the selection and manipulation of independent variables. In line with Setiyadi (2006), this research is about multiple correlation research. To conduct the research, the researcher used a co-relational design of ex post facto designs.. There are two variables vocabulary mastery test as independent variable and reading comprehension test as dependent variable.

The population of this research was the second year students of SMA Negeri 1 Sidomulyo. This research was conducted in SMA Negeri 1 Sidomulyo and This
study used class XI in 2015/2016 academic year, consisting of 30 students. In this research, this study used individual simple probably random sampling. By using it, every student in the class in population gets the same opportunity to be chosen or to be the sample. The first of test gave vocabulary test covering; noun, verb, adverb and adjective that they have learned in class X . The researcher gave reading comprehension test. The test was about determining idea, identifying specific purpose, inference, reference, grammar and vocabulary. These are all they have learned in previous class. After testing vocabulary mastery and reading comprehension, the researcher analysed and interpreted the correlation between those variables.

## RESULT

## Pretest

In this pretest students did the tests, the first was vocabulary mastery test consisted of 60 numbers and reading comprehension test that consisted of 40 numbers and it will be eliminated into 50 numbers of vocabulary mastery and 35 numbers of reading comprehension test for posttest. The percentage result of the variables as follows:

Table 1. Vocabulary mastery try out

| Try out | aspects |
| :---: | :---: |
| $19.4 \%$ | Verb |
| $16.3 \%$ | Noun |
| $19.8 \%$ | Adjective |


| $22.5 \%$ | Adverb |
| :---: | :---: |
| $30.6 \%$ | Translation |

Table 2. Reading comprehension try out

| Try out | aspects |
| :---: | :---: |
| $54,7 \%$ | Identifying specific <br> Informantion |
| $47 \%$ | Reference |
| $46 \%$ | inference |
| $45.7 \%$ | Vocabulary |

The tables show that almost of all aspects was under $50 \%$ it was not satisfied. The data was processed by SPSS 16 and result of try out was:

Table 3. Correlations between vocabulary mastery and reading comprehension in pre test

|  |  | vocab | reading |
| :--- | :--- | ---: | ---: |
| vocab | Pearson Correlation | 1 | $.858^{* *}$ |
|  | Sig. (2-tailed) |  | .000 |
|  | N | 30 | 30 |
| reading | Pearson Correlation | .858 | 1 |
|  | Sig. (2-tailed) | .000 |  |
|  | N | 30 | 30 |

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

Table 3 indicates that the coefficient correlation between students' vocabulary mastery and their reading comprehension was .858 . It means that the correlation
between vocabulary mastery and reading comprehension was not satisfied. After that, some numbers of the test in vocabulary mastery and reading comprehension eliminated. In vocabulary mastery try out there was 10 item numbers that eliminated for posttest of vocabulary mastery, the item numbers were $2,4,9,12$, $15,17,24,31,48,49$. There were 5 numbers eliminated for the reading comprehension posttest. They were number $10,11,16,33,34$. For the reading comprehension there were only 35 numbers that tested to the students.

## Post test

This part was the same as the pretest, but some numbers were eliminated because of not appropriate, etc. The result of this part was:

Table 4. Vocabulary mastery post test

| Post-test | aspects |
| :---: | :---: |
| $23.4 \%$ | Verb |
| $31 \%$ | Noun |
| $31 \%$ | Adjective |
| $28.4 \%$ | Adverb |
| $80 \%$ | Translation |

Table 5. Reading comprehension ppost test

| Post-test | aspects |
| :---: | :---: |
| $67.8 \%$ | Identifying specific <br> Informantion |
| $58.2 \%$ | Reference |


| $57.6 \%$ | inference |
| :---: | :---: |
| $70 \%$ | Vocabulary |

The table above indicated that after try-out students did the posttest better than before. It was proved by the percentage was higher than the try-out, the data was processed by SPSS 16 and the result of posttest was:

Table 6. Correlations between vocabulary mastery and reading Comprehension in post test

|  |  | vocab | reading |
| :--- | :--- | ---: | ---: |
| vocab | Pearson Correlation | 1 | $.989^{* *}$ |
|  | Sig. (2-tailed) |  | .000 |
|  | N | 30 | 30 |
| reading | Pearson Correlation | $.989^{* *}$ | 1 |
|  | Sig. (2-tailed) | .000 |  |
|  | N | 30 | 30 |

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

It means that there is correlation between vocabulary mastery and reading comprehension. So, student with larger vocabularies find reading easier, read more widely, and do better in school. The coefficient correlation is higher that the critical value of table (.989>.32). The statistical analysis also shows that the correlation between students' vocabulary mastery and their reading comprehension was significant ( $\mathrm{p}<.01 ; \mathrm{p}=.000$ ). It was found that the coefficient correlation was .989 . Therefore, the null hypothesis (H01) is rejected and the alternative hypothesis (H1) is accepted.

It is in line with Ali (2010), who found that there was significant correlation between students' vocabulary mastery and their reading comprehension. So, relation to theories in this study is same with the literatures that used.

In order to know the coefficient correlation between students' vocabulary mastery and their reading comprehension, the researcher calculated the data by using Pearson Product Moment Correlation in SPPS 16.

From the table 6 above, it indicates that the coefficient correlation between students' vocabulary mastery and their reading comprehension was .989 . The coefficient correlation is higher that the critical value of table (.989>.32). The statistical analysis also shows that the correlation between students' vocabulary mastery and their reading comprehension was significant ( $\mathrm{p}<.01 ; \mathrm{p}=.000$ ). Therefore, the null hypothesis $\left(\mathrm{H}_{0}\right)$ is rejected and the alternative hypothesis $\left(\mathrm{H}_{1}\right)$ is accepted. The result of this research showed that student's vocabulary mastery significant correlates with their reading comprehension. It indicated that vocabulary mastery and reading comprehension cannot separate each other.

The finding of this research is also related with statements of the experts, the average percentage of reading ability was $63.4 \%$ and the average percentage of vocabulary mastery is $60 \%$, and the result score by SPSS for correlation between vocabulary mastery and reading ability was 0.989 .

It means that there is correlation between vocabulary mastery and reading comprehension.

Furthermore, the result of this study is the correlation between vocabulary mastery and reading comprehension proved (H1). So, there is significant correlation
between students' vocabulary mastery and their reading comprehension. So, relation to theories in this study is same with the literatures that used.

## DISCUSSION

Correlation between Students' Vocabulary Mastery and Students Reading Comprehension

In specifically to the data, it was found that the coefficient correlation was .989 . Therefore, the null hypothesis (H01) is rejected and the alternative hypothesis (H1) is accepted. It can be clearly discussed that classification of correlation of the two variables (vocabulary and reading) was 0.98 . Then, it could be classified as high correlation. It can be interpreted that an increasing ability in reading comprehension, probably has significant relationship with an increasing mastery in vocabulary.

This interpretation is reasonably because in a discrete component of reading aspects. Besides that, the role of vocabulary in reading comprehension is important. It proves that students cannot do well in comprehension without a large of vocabulary, for the passage and question involve a range of word much wide than that a daily conversation. Furthermore, he says that the learner must have an adequate vocabulary because a large vocabulary is very important in learning language. It is in line with Lehr and Osborn (2001) who assest that to understand a text, we need to find the key words of the text. By doing so, students can cover their vocabulary weaknesses since key words functions as the core of whole message conveyed in the text (Roehrig and Guo, 2011).

Table 7. Correlations

|  |  | vocab | reading |
| :--- | :--- | ---: | ---: |
| vocab | Pearson Correlation | 1 | $.989^{* *}$ |
|  | Sig. (2-tailed) |  | .000 |
|  | N | 30 | 30 |
| reading | Pearson Correlation | $.989^{* * *}$ | 1 |
|  | Sig. (2-tailed) | .000 |  |
|  | N | 30 | 30 |

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

## Table 8.Regression

Model Summary

| Model | R | R Square | Adjusted R <br> Square | Std. Error of the <br> Estimate |
| :--- | :---: | ---: | :---: | :---: |
| 1 | $.989^{\mathrm{a}}$ | .978 | .977 | 1.17329 |

a. Predictors: (Constant), vocab

The table 8 means that, the correlation score (R) was .989 and coefficient determination ( R square) was .978 or $97.8 \%$ and it means that the independent variable (vocabulary mastery) has correlation $97,8 \%$ to the dependent variable (reading comprehension). In other words, this means that impossible if students understand the text reading without a large mastering of vocabulary.

## CONCLUSION

From the table above, it indicates that the coefficient correlation between students' vocabulary mastery and their reading comprehension in students second grade MIA 3 at SMA N 1 Sidomulyo was .989. The coefficient correlation is
higher that the critical value of table (.989>.32). The statistical analysis also shows that the correlation between students' vocabulary mastery and their reading comprehension was significant ( $\mathrm{p}<.01 ; \mathrm{p}=.000$ ). Therefore, the null hypothesis (H0) is rejected and the alternative hypothesis (H1) is accepted. The result of this research showed that student's vocabulary mastery significant correlates with their reading comprehension. It indicated that vocabulary mastery and reading comprehension cannot separate each other.

The conclusions of this research can be stated as follows:

1. Vocabulary mastery has correlation with reading comprehension because in terms of identifying specific information the percentage correct answer of the students was $67.8 \%$ this also means that the students were able to recognize the words or the vocabulary in the text of reading test.
2. Vocabulary mastery has also correlation to find reference of the reading text, because the percentage correct answer of the students was $58.2 \%$ the students were able to differentiate which is reference sentences, topic sentences, etc.
3. Vocabulary mastery has also correlation to find inference of the reading text, because the percentage correct answer of the students was 57.6 \%. It means that the students were able to differentiate which is inference and reference sentences, main idea sentences, etc.

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