# THE CORRELATION BETWEEN STUDENTS' VOCABULARY AND GRAMMAR MASTERY AND READING COMPREHENSION

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#### Abstract.

Tujuan penelitian ini adalah untuk menemukan apakah ada hubungan antara penguasaan kosakata, tata bahasa dan pemahaman membaca siswa. Desain penelitian ini kuantitatif menggunakan *ex post facto designs*. Populasi dari penelitian ini adalah siswa kelas dua di SMAN 1 Tumijajar. Peneliti menggunakan *sampel* penelitian sebanyak 35 siswa. Instrumen yang digunakan adalah tes kosakata, tata bahasa, dan pemahaman membaca. Data yang terkumpul dianalisa menggunakan *Pearson Product Moment Correlation* di SPSS 16.0. Hasil penelitian menunjukkan bahwa nilai r dari penguasaan kosakata and pemahaman membaca, penguasaan tata bahasa dan pemahaman membaca, dan penguasaan kosakata, tata bahasa dan pemahaman membaca .839, 726, dan .870. Dapat disimpulkan bahwa ada hubungan yang *significant* antara penguasaan kosakata, tatabahasa dan pemahaman membaca siswa. Semakin tinggi penguasaan kosakata dan tatabahasa, maka semakin tinggi pemahaman membaca siswa.

The purpose of this study is to find out whether there is significant correlation between students' vocabulary and grammar mastery and their achievement in reading comprehension. This was quantitative research applied *ex post facto designs*. The population of this study was the second grade students of SMAN 1 Tumijajar. The researcher used sample consist of 35 students. The instrument of this research was in the form of vocabulary and grammar mastery test and reading comprehension test. The data collected were analyzed by using Pearson Product Moment Correlation in SPSS 16.0. The result showed that r of students' vocabulary mastery and reading comprehension, grammar mastery and students' reading comprehension, and students' vocabulary and grammar mastery and their achievement in reading comprehension were .839, .726, and .870. Therefore, it can be concluded that there is correlation between students' vocabulary and grammar mastery and their achievement in reading comprehension. The higher students' master vocabulary and grammar, the higher students' get achievement reading comprehension.

**Keyword:** grammar mastery, reading comprehension, vocabulary mastery

#### INTRODUCTION

Reading is seen as an essentially active activity since one of the objectives of reading teaching-learning process for the second grade of Senior High School ask the students to be able to construct and comprehend meaning of the text. Basically, it is the same as comprehension of reading text. All students are expected to be able to understand the main idea of the text, factual information, stated and unstated information in the text as well as the vocabulary in the text. Most educators agree that the major purpose of reading should be the construction of meaning comprehending and actively responding to what is read. Therefore, if a student says words in a passage without understanding their meaning, one will hesitate to call that reading. Relating to the aim of reading, Willis (2008) states

Nuttal (1985) states that there are five reading skills that should be mastered by reader to comprehend the text deeply; they are as follow:

that by reading, someone can find the information he/she needs with the specific

information. Reading help the reader get what they want to know. In addition, by

reading we are learning much about the meaning of culture, practice and forms of

## 1. Determining main idea

culture.

Determining idea is a skill to grasp and find the main point of the passage by summarizing the passage and look for repetition of ideas/words.

### 2. Finding the specific information or part of text

Finding the specific information or part of text means looking for the information that relevant to the goal in mind and ignores the irrelevant.

#### 3. Finding reference

Reference is the intentional use of one thing to indicate something else in which one provides the information necessary to interpret the other. Finding reference means interpreting and determining one linguistic expression to another.

### 4. Finding inference

Inference is good guess or conclusion drawn based on the logic of passage. Finding inference means the reader imply the sentences or passages understand and conclude it logically.

### 5. Understanding vocabulary

Understanding vocabulary means comprehend what the words mean. When vocabulary mastery improves, comprehending will be deeper. Since comprehension is ultimate goal of reading, the reader cannot overestimate the importance of vocabulary development.

Reading a book, an article, or passage in English for some students is (sometimes) not an easy work. It relates to some factors, one of them is their lack of vocabulary. As we know, vocabulary is very important to support the development of the four skills of the language. Tarigan (1986) states that the quality of one's language depends upon the quantity of his or her knowledge of vocabulary, the richer one's vocabulary is the more one master a language.

Fries (1970) classified English vocabulary or word into four groups, they are:

#### 1. Content word

Content word represents the name of the subject or thing, that is concrete noun (book, scissors, and bag) action done by with these things, that is verb (go, find, and run), and the qualities of these things, that is adjective (small, tall, and far).

#### 2. Function word

Function word are those word which are used as a means of expressing relation grammar structure, such as conjunction (but, or, and), article (a, an, and the), and auxiliaries (are, be, is).

#### 3. Substitute word

Substitute word are those, which represent the individual things or specific action as substitute for whole from classes of words, that is, identifies (anything, anyone).

#### 4. Distribute word

Distribute word are those are distribute in use according to grammatical matter as presence of a negative such as either, too, or, yet.

Another important factor is the knowledge of grammar. The knowledge of grammar is important in mastering a language because grammar intersects and overlaps with the four language skills. The lack of knowledge of grammar will result in the grammatically incorrect sentences which can lead to misunderstanding of what one is saying or writing. Further, knowledge of grammar is important in comprehension because complexity of grammar can cause difficulty. Baldwin (1985) states that reading a text is an interactive process of the grammar competence owned by the reader. It is also to say that grammar

gives high contribution to students' reading comprehension as well. Regarding to the explanation above, it is reasonable because reading comprehension is naturally different skill to achieve, because of some crucial factors such as grammar, vocabulary, reading interest, etc.

As we know in Indonesia, grammar is related to the structure of sentence. Jeremy Hermer (1998) states that when considering sentence grammar, we need to know various things, they are:

#### a. Part of speech

What words can be used for subjects? How do we join different sentences? What can come before and after nouns? This is one of the groups into which words are divided.

### b. Noun types

In English, there are many types of noun in order to make a sentence, like countable and uncountable, plural and singular, collective nouns, compound nouns, and noun phrase.

#### c. Verb types

There are three important types of verb to be aware of *auxiliary verb*, *main* verb and phrasal verb.

#### d. Verb forms

This is kind of verb related to the time when we do the activity. In grammar, people called it tenses.

#### e. Pronoun

There are four basic types of pronoun; those are personal pronoun, reflexive pronoun, possessive pronoun, and relative pronoun.

#### f. Adjectives

Adjective can be used before and after nouns. They can have many forms, those are comparative and superlative (better and best, more interesting and most interesting, etc), adjective order, adjective and preposition (interested in, keen on, etc), and adjective as nouns (the blind, etc).

#### g. Adverbs

Adverb can be of time (early, late, etc), manner (he played *well*, she ran *quickly*, etc) and place (in the room, in the kitchen, etc). Adverb can appear at the end of the sentence, at the beginning, or in the middle. It also can modify adjectives, like a *wonderfully* physical performance, an *unusually* large cucumber, etc.

#### h. Prepositions

A word put before a noun or pronoun to show how it is related to another word. Preposition usually comes before a noun but can also come at the end of a clause with certain structures.

#### i. Articles

Articles (the, a, an) belong to a class of words called *determiners*. Other examples of determiners are "this", "that", "these", "those", "some", "all of".

#### j. Conjunctions and conditionals

Conjunction is a word that connects sentences, clauses, or words (and, but, or). Conditional sentences are formed when the conjunction "if" is used to

preface a condition, for example "if it is rains (condition), you will get wet (result)".

Therefore, it can be concluded that comprehension is achieved from the knowledge of vocabulary. The comprehension of also resulted from achieving the meaning originated from the knowledge of grammar that is the knowledge of word form and relation among words in sentences. The superior amount of vocabulary mastery is needed in comprehending texts. Grammar mastery is also not least important. The variables are aspects supporting the comprehension of texts. If a student has mastery of vocabulary and grammar, it is expected that the student is able to comprehend texts. If a student does not have mastery of vocabulary and grammar, the comprehension is far from expectation. Grammar rules the word from and sequence of words in a sentence. Sentences in a text are ruled according to grammar rules which influenced meaning. Sentences are arranged by following the grammar rules give meaning to the reader as intended by the author. Thus, it can be assumed that there is positive correlation between vocabulary and grammar mastery in reading comprehension simultaneously. In other words, the higher one of vocabulary and grammar mastery, the higher of reading comprehension will be.

Based on the explanation above, the researcher is interested in investigating the possible correlation between students' vocabulary and grammar mastery in their reading comprehension.

#### **METHOD**

In this research, the researcher aimed to find the correlation between students' vocabulary and grammar mastery and their achievement reading comprehension. This research was about multiple correlation research. To conduct the research, the researcher used a co-relational design of *ex post facto designs* (Setiyadi, 2006). Here, the researcher only administered the tests to know both mastering of vocabulary and grammar in reading comprehension to a group of students. So, there was no treatment or experiment of any kind to subjects. The researcher gave the test about vocabulary mastery, grammar mastery and reading comprehension. After that, the data gained from the test was analyzed to see whether mastering vocabulary and grammar related to the ability of reading comprehension or not. The researcher used quantitative method to analyze the result of research. This method was used to find the correlation between students' vocabulary mastery and grammar mastery and their achievement in reading comprehension.

In this research there were three variables that were dependent and two independent variables. The dependent variable was students' reading comprehension. On the other hand, independent variables were students' vocabulary and grammar mastery. The score showed a data about students' achievement in vocabulary and grammar mastery and their reading comprehension which can be used to identify the correlation between students' vocabulary and grammar mastery and their achievement in reading comprehension. The population of this research was all the students of the second grade of SMAN 1 Tumijajar. There were 10 classes of the second grade students that consist of 35 students for each class. The students were divided into 2

groups, XI MIA and XI IIS. From those numbers of the students, the researcher chose one group that was XI MIA. Then, the researcher had chose XI MIA<sup>2</sup> through random sampling as a sample in order to find the validity, reliability, difficulty level, and discrimination power of the test item. After getting a good test items, by the random sampling technique, the researcher used XI MIA<sup>3</sup> at the SMAN 1 Tumijajar as the subject to collect the data.

In this research, the researcher used some instruments for conducting the research. The instruments were test of vocabulary and grammar mastery and reading comprehension. So, the researcher gave 50 items of vocabulary and grammar mastery and reading comprehension. The test conducted 90 minutes for reading comprehension and 60 minutes for vocabulary and grammar mastery.

The researcher made steps after conducting a research by using tests, the researcher analyzed the data by using Correlation in SPSS (Statistical Program for Social Science) 16.0. The researcher collected the data by looking at the result of test of vocabulary and grammar mastery and reading comprehension to find out the result of students' vocabulary and grammar mastery and their achievement in reading comprehension. The result of the test was in form of score or interval data. After getting the result, the researcher analyzed three data (1) the correlation between students' vocabulary and their achievement in reading comprehension, (2) the correlation between students 'grammar mastery and their achievement in reading comprehension, and (3) the correlation between students' vocabulary and grammar mastery and their achievement in reading comprehension.

#### **RESULTS AND DISCUSSIONS**

# Correlation between Students' Vocabulary Mastery and Their Reading Comprehension

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.

Based on the calculation, the researcher found that the coefficient correlation between students' vocabulary mastery and their reading comprehension was .839. The coefficient correlation is higher that the critical value of  $r_{table}$  (.839>.32). The statistical analysis also show that the correlation between students' vocabulary mastery and their reading comprehension was significant (p< .01; p= .000). Therefore, the null hypothesis ( $H_{01}$ ) is rejected and the alternative hypothesis ( $H_{1}$ ) 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.

# Correlation between Students' Grammar Mastery and Their Achievement in Reading Comprehension

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

Based on the calculation, the researcher found that the coefficient correlation between students' grammar mastery and their achievement in reading comprehension was .726. The coefficient correlation is higher that the critical value of  $r_{table}$  (.726>.32). The statistical analysis also show that the correlation between students' grammar mastery and their achievement in reading comprehension was significant (p< .01; p= .000). Therefore, the null hypothesis (H<sub>02</sub>) is rejected and the alternative hypothesis (H<sub>2</sub>) is accepted. The result of this research showed that student's grammar mastery significant correlates with their reading comprehension. It indicated that grammar mastery and reading comprehension also cannot separate each other.

# Correlation between Students' Vocabulary and Grammar Mastery and Their Achievement in Reading Comprehension

In order to determine simultaneously correlation and contribution of students' vocabulary and grammar mastery on their reading comprehension, the researcher analyzed the data using Linear Regression in SPSS 16.

Based on the calculation, the researcher found the coefficient correlation student's vocabulary and grammar mastery and their reading comprehension (r) was .870. The coefficient correlation is higher than critical value of  $r_{table}$  (.870>.32).

Therefore, the null hypothesis  $(H_{03})$  is rejected and the alternative hypothesis  $(H_3)$  is accepted. The result of this research showed that student's vocabulary and grammar mastery have simultaneous correlation on their reading comprehension. It indicated that both of vocabulary and grammar mastery simultaneously have significant correlation and contribution on the reading comprehension.

#### **DISCUSSION**

The main finding of this research was whether there is significant correlation between students' vocabulary mastery and students' reading comprehension. Based on the result above, it is line with has been found by previous research. It was describe of each point bellow.

# **Vocabulary Mastery and Reading Comprehension**

The role of vocabulary in reading comprehension is important. Burton (1982:98) says that we 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.

In other words, the vocabulary mastery of students is significant to improve their reading comprehension. Having adequate vocabulary, the students will understand what the message of English passage. By reading many passages, the students will learn the new difficult words, and then they will curious to know the meaning of that word. In that situation, it will increase the students' vocabulary (the students' vocabulary will get richer) and not stuck only in familiar word.

# **Grammar Mastery and Reading Comprehension**

It is obvious that grammar mastery plays an important role for the students to comprehend the text (reading). According to Brown (2001: 362) states that grammar is the system of rules governing the conventional arrangement and relationship of words in a sentence. Considering that a correct grammar is important because grammatical mistakes can lead to misunderstanding what one

is saying or writing. As a result grammar is the rules that show how words are combined, arranged or changed to show certain kinds of meaning. Grammar is important to students to understand the meaning of the text that they read and to make meaning clear to readers without grammar, words when combined with other words may not have meaning.

### **Vocabulary and Grammar Mastery and Reading Comprehension**

As writer mentioned before, each student had different rate of grammar mastery and vocabulary mastery to reading comprehension, whether it was high, moderate or even low and those results of students' grammar mastery and vocabulary was correlated with their reading ability.

As a result, grammar, vocabulary, and reading have correlation one to the other. For understanding reading comprehension students must know the vocabulary first because it is a basis of language. It is impossible for the students to read a foreign language without having enough knowledge of vocabulary. Besides that, grammar has important role in learning English, so it also has a big influence to reading comprehension. Students who want to get a text message, have to know about how the text is form or they will not able to have complete understanding about the text was mean. So, when their score of grammar and vocabulary is high, their score in reading comprehension is also high.

As mentioned in the frame of theories done by Widiono (2007) found that students had difficulty in comprehending reading text. Some aspects that caused the students had difficulty in comprehending the text which he found in his research were: students' lack of vocabulary and grammar, students' interest

in the reading text, teachers' ability in guiding and managing their class and inappropriate reading strategy.

Based on the statement above it reveals that vocabulary and grammar are important in learning language especially in reading. Vocabulary is the first stage to learn and to know the text itself. Because, when a student has a little vocabulary, they will be difficult to understand grammar in reading text. So, the student must master grammar formations if they want to improve their skill in reading.

#### **CONCLUSION**

There is significant correlation between students' vocabulary and grammar mastery and their achievement in reading comprehension. It means that the higher students' master vocabulary and grammar, the higher students' get achievement reading comprehension.

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