

THE CORRELATION BETWEEN STUDENTS' VOCABULARY AND GRAMMAR MASTERY AND THEIR READING COMPREHENSION ABILITY AT THE SECOND YEAR OF MAN 2 BANDAR LAMPUNG

Nadya Ayu Paradita, Sudirman, Ramlan Ginting Suka

nadyaayuparadita@yahoo.com

Abstrak: Penelitian ini bertujuan untuk mengetahui apakah ada korelasi antara penguasaan kosakata dan penguasaan tata bahasa terhadap kemampuan membaca pemahaman siswa. Penelitian ini menggunakan desain *ex-post facto co-relational*. Subjek dari penelitian ini adalah kelas XI MIA 1 MAN 2 Bandar Lampung yang terdiri dari 35 siswa. Instrumen yang digunakan untuk penelitian ini adalah tes kosakata, tes tata bahasa, dan tes membaca pemahaman. Data berupa angka yang diperoleh dianalisis menggunakan *Pearson Product Moment Correlation* dan *Multiple Linear Regression Test*. Hasil menunjukkan bahwa terdapat korelasi yang signifikan antara penguasaan kosakata dan tata bahasa siswa dengan kemampuan pemahaman membaca mereka dengan koefisien korelasi adalah .865, .796, .867. Oleh karena itu, pembelajaran kosakata dan tata bahasa harus ditingkatkan untuk meningkatkan kemampuan membaca pemahaman.

Abstract: The objective of this research was to find out whether there is a correlation between students' vocabulary mastery, grammar mastery, and their reading comprehension ability. This study used *ex post facto co-relational* design. The subject of this research was class XI MIA 1 of MAN 2 Bandar Lampung consisting of 35 students. The instruments were vocabulary test, grammar test, and reading comprehension test. The data were analyzed by using *Pearson Product Moment Correlation* and *Multiple Linear Regression Test*. The result showed that there is a significant correlation between students' vocabulary mastery, grammar mastery, and their reading comprehension ability with the coefficient of correlation were .865, .796, .867. Therefore, vocabulary mastery and grammar mastery should be improved to have a good reading comprehension ability.

Keywords: vocabulary mastery, grammar mastery, reading comprehension ability

INTRODUCTION

Based on the syllabus from English Curriculum for second year of Senior High School (2013), there is a basic competence that says the students should be able to capture contextually meaning related to social function, text structure, and linguistic elements of recount text. This basic competence refers to one of basic language skills that is reading. Reading is an important skills that should be mastered by the students. They have to master reading skill because reading cannot be separated from teaching and learning process. In teaching and learning process, there will always be reading activity because it is usually found English texts in written form.

According to Cline et.al. (2006), reading is decoding and understanding written texts. Decoding requires translating the symbols of writing system (including Braille) into the spoken words which they represent. Understanding is determined by the purposes for reading, the context, the nature of the text, and the readers' strategies and knowledge. Nuttall (1982) states that there are five reading skills that should be mastered by the reader to comprehend the text deeply; they are described as follow:

- 1) Determining main idea
Finding the main idea of a paragraph is one of the most important specific comprehension ability. The main idea is the essence of the paragraph, or rather what the writer is trying to get across to the reader. In other words, that is what the writer wants a reader to know about. Therefore, the main idea is the important idea that the writer develops throughout the paragraph. The example of finding main idea can be illustrated into a question as follows: *What words state the main idea of the text?*
- 2) Finding the specific information or part of text
Specific information develops the topic sentence by giving definition, examples, facts, comparison, analogy, cause and effect statistic and quotation. The question of finding the specific information is as follows: *Who is the character of the text?*
- 3) Finding reference
References are words or phrases used either before or after the reference in the reading material. When such words are used, they are signals to the reader to find the meaning in the text. There are two types of references; cataphoric and anaphoric reference. A cataphoric reference unit refers to another unit that is introduced later on in the text/speech. To understand the unit refers to by a cataphoric reference a reader would need to look ahead in the text. Meanwhile, an anaphoric reference unit, on the other hand, refers to another unit that was introduced earlier in the text. To understand the unit referred to by an anaphoric reference a reader would need to look back in the text. The following question is the example of finding reference: "... **He** is the best badminton player in our family" (last line). *The bold word refers to ...*
- 4) Finding inference
Inference is good guess or conclusion drawn based on the logic of passage. Finding inference means the reader implies the sentences or passages understand

and conclude it logically. The question containing inference meaning can be as follows: *What is the purpose of this text?*

5) Understanding vocabulary

Vocabulary is stock of word used by people or even person. Concerning with those statements indeed vocabulary is fundamental for everyone who wants to speak or to produce utterances for reading. The question consisting vocabulary aspect can be drawn as follows: "*Peter **is interested** in sports very much.*" *The bold word is synonym of ...*

Apparently, reading is not an ability that is easy to be mastered. Previous research conducted by Ameiratrini (2017), her research finding in SMA N 1 Abung Selatan, the students still had a low ability in reading comprehension. She found that students had difficulty in comprehending the reading text. They cannot find the information easily from the text, because they were dealing with a number of problems in reading comprehension. The problems in their reading comprehension were the lack of vocabulary and grammar. Since a text is collection of words and sentences, vocabulary and grammar mastery can affect students' reading comprehension. The lack of their vocabulary and grammar mastery may affect their reading comprehension ability. The students also have to master vocabulary and know the grammar as well as possible to determine the type of the text.

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. From the statement, it means that people who have little vocabulary will face problem in communication including reading. Without vocabulary, it is difficult for students to obtain any kind of news and information stated in any printed material. By having a large number of words, this kind of difficulty can be solved. Fries (1970) classified English word into four groups, they are discussed in the following points:

1) Content word

Content words represent the name of objects or things that are the concrete nouns (dog, motorcycle, and box); action done by with those things, that is: verb (drive, hit, push); the qualities of these things that is adjective (charming, beautiful, heavy, tall); and the indication such meanings as frequency, degree, manner and place, that is adverbs (carefully, here, now).

2) Function word

Function words are those words which are used as a means of expressing relation of grammatical structure. Function words include determiners (which, this, each and some), conjunction (and, but, or, and after), prepositions (in, at, on, and until), article (a, an, and the), and auxiliaries (are, be, have and do).

3) Substitute word

Substitute words are those, which represent the individual things or specific action as substitute for whole from classes of words. In other words, substituted words are indefinite pronouns such as anything, anyone, everybody, and nothing.

4) Distribute word

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

Meanwhile, 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. Grammar is the rules that show how words are combined, arranged, or changed to show certain kinds of meaning. Knowledge of grammar is important in comprehension because complexity of grammar can cause difficulty. The lack of knowledge of grammar will cause in the grammatically incorrect sentences which can lead to misunderstanding of what is said or written. When considering sentence grammar we need to know various things (Harmer, 1999), including parts of speech:

1) Noun types

A noun is a word (or group of words) that is the name of a person, a place, a thing or activity or a quality or idea; nouns can be used as the subject or object of a verb. Nouns can be divided into sub classes. There are proper nouns and common nouns. There are also countable nouns (pens, pillows, fruits), mass or uncountable nouns (sugar, water, money), abstract nouns (idea, religion, faith), concrete nouns (chair, table, cap), and collective nouns (class, government, group).

2) Verb forms

Verbs are words that denote or describe an action, experience or state. Vendler in Hatch and Brown (1995) places verbs into four classes: activities (sleep, drink, eat), accomplishments (catch, kill, build), achievement (lose, find, recognize), and states (love, have, know). Verb form is kind of verb related to the time when we do the activity. In grammar, people called it tenses. There are 16 tenses in English.

3) Pronoun

A pronoun is defined as a word or phrase that is used as a substitution for a noun or noun phrase, which is known as the pronoun's antecedent. Pronouns are short words can act as a subject, direct object, indirect object, object of the preposition, and more and takes the place of any person, place, animal or thing. For example: subjects (*I, he, she, you*), object (*me, her, us, them*), and reflexive (*myself, yourself, himself*).

4) Adjectives

An adjective is a part of speech which describes, identifies, or quantifies a noun or a pronoun. Basically, the main function of an adjective is to modify a noun or a pronoun so that it will become more specific and interesting. 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), adjective and preposition (interested in, keen on), and adjective as nouns (the blind).

5) Adverbs

An adverb is a word that is used to change, modify or qualify several types of words including an adjective, a verb, a clause, another adverb, or any other type of word or phrase, with the exception of determiners and adjectives, that directly

modify nouns. Specifically, adverbs provide a description of how, where, when, in what manner and to what extent something is done or happens. The examples: carefully, immediately, and wisely.

6) Prepositions

A preposition is a word used to link nouns, pronouns, or phrases to other words within a sentence. They act to connect the people, objects, time and locations of a sentence. Prepositions are usually short words, and they are normally placed directly in front of nouns. The examples: after, in, to, on, and with.

7) Articles

An article is a word that comes before a noun. There are two kinds of articles: definite articles and indefinite articles. In English there is just one definite article: "the". There are two indefinite articles: "a" and "an". The word "an" is used before a word starting with a vowel sound: we say "a horse", "a child", "a European" (Euro has a "Y" sound), "a university", but "an orange", "an elephant".

8) Conjunctions

A conjunction is a part of speech that acts as a connector. Conjunctions serve to join together sentences, phrase, or clause. The examples: for, but, when, before, and since.

Based on the explanations, the researcher assumes that students' vocabulary and grammar mastery seems to have a significant correlation toward their reading comprehension ability. Understanding the vocabulary and grammar is important in reading. It can help the students to comprehend the text. If the student failed to understand vocabulary and grammar, they cannot find the idea from the paragraph and they also cannot answer the question because they do not know the strategy to answer the question. It is clear vocabulary and grammar are needed to face the difficulties in understanding reading text.

METHOD

This research is quantitative research using ex post facto co-relational design, which involves only one group as the sample of the research and does not use any control class. There are three variables in this research: vocabulary and grammar mastery as the independent variables and reading comprehension as the dependent variable.

The population of this research was second year students of MAN 2 Bandar Lampung and class XI MIA 1 consisting of 35 students was chosen as the sample of this research by using random sampling technique. Before collecting the data, the tests were administered in class XI MIA 2 that consisted of 30 students to find validity, reliability, level of difficulty and discrimination power of the test items.

After getting good test items, the researcher gave the tests to the class XI MIA 1. There were three kinds of tests, and those were grammar test, vocabulary test, and reading comprehension test. The tests were in the form of multiple choice items with four alternative answers. Each test consisted of 40 items and the time allocation for each test was sixty minutes. The data that had been collected were analysed in SPSS by using formula Pearson Product Moment Correlation and Multiple Linear Regression.

RESULT

The Correlation between Students' Vocabulary Mastery and Their Reading Comprehension

In order to know the coefficient correlation between students' vocabulary mastery and their reading comprehension ability, the researcher distributed vocabulary test and reading comprehension test in form of multiple choices with four alternative answers. The tests consist of 40 items and there were 35 students who did the tests. The range score for vocabulary test was 47.5 – 87.5. For reading comprehension test, the range score was 35 – 92.5. After collecting the data, the researcher organized the data by using Pearson Product Moment Correlation (SPSS). The results of vocabulary mastery (X1) and reading comprehension ability (Y) are presented in the following table:

Table 1. Correlation Coefficient of X1 and Y
Correlations

		X1	Y
X1	Pearson Correlation	1	.865**
	Sig. (2-tailed)		.000
	N	35	35
Y	Pearson Correlation	.865**	1
	Sig. (2-tailed)	.000	
	N	35	35

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

The table above shows the coefficient of correlation between students' vocabulary mastery and reading comprehension ability is .865. The r-table at significant level 0.01 for 35 students is .418. It means that the correlation is significant because the coefficient correlation is higher than the value of r-table ($0.865 > 0.418$) at the significance level 0.01. This research verifies that students' vocabulary mastery significantly correlates with their reading comprehension ability. It indicates that vocabulary mastery and reading comprehension cannot be separated one another.

The Correlation between Students' Grammar Mastery and Their Reading Comprehension

In order to know the coefficient correlation between students' grammar mastery and their reading comprehension ability, the researcher distributed grammar test and reading comprehension test in form of multiple choices with four alternative answers. The tests consist of 40 items and there were 35 students who did the tests. The range score for grammar test was 42.5 – 82.5. For reading comprehension test, the range score was 35 – 92.5. After collecting the data, the researcher organized the data by using Pearson Product Moment Correlation (SPSS). The results grammar mastery (X2) and reading comprehension (Y) are presented in the following table:

Table 2. Correlation Coefficient of X2 and Y
Correlations

		X2	Y
X2	Pearson Correlation	1	.796**
	Sig. (2-tailed)		.000
	N	35	35
Y	Pearson Correlation	.796**	1
	Sig. (2-tailed)	.000	
	N	35	35

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

From the calculation of the SPSS, the researcher found the correlation between students' grammar mastery and reading comprehension ability is .796. The r-table at significant level 0.01 for 35 students is .418. The coefficient correlation is higher than the critical value of r-table ($0.796 > 0.418$) at significance level 0.01. The result of this research shows that students' grammar mastery correlates significantly with their reading comprehension ability. It indicates that grammar mastery effects on reading comprehension.

The Correlation between Students' Vocabulary and Grammar Mastery and Their Reading Comprehension

In order to know the coefficient correlation between students' vocabulary and grammar mastery and their reading comprehension ability, the researcher distributed three instruments which were vocabulary test, grammar test, and reading comprehension test in form of multiple choices with four alternative answers. The tests consist of 40 items and there were 35 students who did the tests. The range score for vocabulary test was 47.5 – 87.5. For grammar test, the range score was 82.5 – 42.5. For reading comprehension test, the range score was 35 – 92.5. After collecting the data, the researcher organized the data by using Multiple Linear Regression (SPSS). The results are presented in the table below:

Table 3. The Coefficient of Multiple Correlation Variable X1 and X2 to Y

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.867 ^a	.752	.736	8.28020	.752	48.462	2	32	.000

a. Predictors: (Constant), X2, X1

Based on the Table 3, it can be seen that the coefficient correlation (R) is 0.867, which means there is a strong correlation among vocabulary mastery, grammar mastery and reading comprehension. On the other hand, the coefficient of determination of vocabulary and grammar mastery towards reading comprehension is 0.752. It means that the contribution percentage of vocabulary and grammar mastery towards reading comprehension 75.2% that means the rest 24.8% is determined by other factors.

After getting the contribution percentage of students' vocabulary mastery and grammar mastery towards their reading comprehension simultaneously, then the researcher has to find out whether the independent variables (X1 and X2) significantly correlate on the dependent variable (Y) simultaneously. This could be found by using ANOVA F Test. The results are shown below:

Table 4. Regression Coefficient Significance Test of Variables X1 and X2 to Y
ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6645.312	2	3322.656	48.462	.000 ^a
	Residual	2193.974	32	68.562		
	Total	8839.286	34			

a. Predictors: (Constant), X2, X1

b. Dependent Variable: Y

Table 4 shows that the acquisition value of F-count= 48.462 > F-table= 3.287 and Sig. 0.000<0.05 which means there is significant correlation of students' vocabulary and grammar mastery together on the students' reading comprehension ability. It indicates that they have significant correlation and contribution on reading comprehension.

DISCUSSION

The Correlation between Students' Vocabulary Mastery and Their Reading Comprehension

In this research, the result shows the coefficient correlation between students' vocabulary mastery and their reading comprehension ability is 0.865 at the significance level 0.01. It means that students' vocabulary mastery significantly correlated with their reading comprehension ability. This result is appropriate to the opinion of Wainwright (2006) that vocabulary is the important factor in reading. He also says that the larger number of words one masters, the easier it is to make the sense of the text. As mentioned previously it can be obviously seen that students' vocabulary mastery takes an important role in reading comprehension ability.

The students' vocabulary mastery can affect their reading comprehension ability. Students who had good vocabulary mastery also had good reading comprehension ability. This finding is supported by Wassman and Rinsky (2002) that say the more words students know the better and faster students can understand what students read. Therefore, students who master in vocabulary, it will help them to succeed in reading comprehension. In brief, students' vocabulary mastery significantly improves their reading comprehension ability.

The Correlation between Students' Grammar Mastery and Their Reading Comprehension

Based on the data of this research, it was found that there is a significant correlation between students' grammar mastery and reading comprehension ability. The coefficient of the correlation between students' grammar mastery and reading comprehension is 0.796 at the significance level 0.01. It is obvious that grammar mastery plays an important role for the students to comprehend the text. It can say that grammar gives high contribution to students' reading comprehension. This is in accordance with the opinion of Baldwin (1985) that stated reading a text is an interactive process of the grammar competence owned by the reader.

From the result, it was revealed that the students who had good mastery in grammar could understand reading well, because the rules of grammar help to determine the mechanics of reading, which what makes the connection between grammar and reading is important. According to Richards and Renandya (2002), people agree that grammar is too important to be ignored, and without good knowledge of grammar, learners' language development will be severely constrained. A correct grammar is important because grammatical mistakes can lead to misunderstanding what one is saying or writing. 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.

The Correlation between Students' Vocabulary and Grammar Mastery and Their Reading Comprehension

The result of data analysis shows a significant correlation between students' vocabulary and grammar mastery and their reading comprehension. It is proven by the result of the coefficient correlation (R) that is 0.867. It is also proven by the coefficient of determination of vocabulary and grammar mastery towards reading comprehension which is 0.752. It is interpreted that the contribution percentage of vocabulary and grammar mastery towards reading comprehension 75.2% that means the rest 24.8% is determined by other factors. It means that vocabulary and grammar mastery are included as aspects that give high contributions in reading comprehension ability. It was also supported by the previous research that had been done by Ameiratrini (2017). She found that the students still had low score in reading comprehension test. It was caused by the problems that they had in reading comprehension which were their lack of vocabulary and grammar mastery.

There is also a result of F-count which is 48.462. The value of F-count is more than the value of F-table which is 3.287 and Sig. $0.000 < 0.05$. The value of F-count and Sig. is also proven that there is a significant correlation of students' vocabulary and grammar mastery together on the students' reading comprehension ability. Students who have a good score in vocabulary and grammar test will get a good score in reading ability. For example student with attendees number 7, he got score 86 on vocabulary test, 82.5 on grammar test, and 92.5 on reading comprehension test. Wilkins (1972) stated that without grammar very little can be conveyed; without vocabulary nothing can be conveyed. Based on the theory, it can be understood that without knowledge of vocabulary and grammar mastery the students will get difficulty in comprehending a reading text since a text is collection of words and sentences.

Based on the result and the finding above, it reveals that vocabulary and grammar are important and they influence learning language skill especially in reading, because a text consists of words and grammar, understanding the meaning of words in a text is the first stage to learn to understand the text. Then, vocabulary will make the students to understand easily the grammar in the text, after that the students can comprehend the text properly.

CONCLUSIONS

There is significant correlation between students' vocabulary mastery, grammar mastery, and reading comprehension ability. Those two things which are vocabulary and grammar mastery have become parts of reading text that cannot be separated. It means the better students' vocabulary and grammar mastery, the better their reading comprehension ability.

REFERENCES

- Ameiratrini, T. (2017). The use of jigsaw strategy in improving students' achievement in reading comprehension at the first grade of SMAN 1 Abung Selatan. Unpublished Script. Bandar Lampung: University of Lampung.
- Baldwin, R. (1985). *Content area reading*. Iowa: Kendal/Hunt.
- Cline, F., Johnstone, C., & King, T. (2006). *Focus group reaction to three definition of reading*. Minneapolis, M.N.: National Accessible Reading Assessment Project.
- Departement Pendidikan & Kebudayaan. (2013). *Standar kompetensi mata pelajaran bahasa Inggris*. Jakarta: Depdikbud.
- Fries, C. C. (1970). *Teaching and learning English as foreign language*. Ann Arbor: The University of Michigan Press.
- Harmer, J. (1999). *How to teach grammar*. White Plains, NY: Pearson/Longman.
- Hatch, E., & Brown, C. (1995). *Vocabulary, semantics, and language education*. New York: Cambridge University Press.
- Nuttall. (1982). *Teaching reading skills in a foreign language*. London: Heinemann Educational Books.
- Richards, J. C., & Renandya, W. A. (2002). *Methodology in language teaching: An anthology of current practice*. New York, USA: Cambridge University Press.
- Tarigan, H. G. (1986). *Pengajaran kosakata*. Bandung: PT. Angkasa.
- Wainwright, G. (2006). *Speed reading better recalling (Indonesian Edition)*. Jakarta: Gramedia Pustaka.
- Wassman, R., & Rinsky, L. A. (2002). *Effective reading in a changing world*. NJ: Prentice Hal.

Wilkins, D. A. (1972). *Linguistics in language teaching*. London: Edward Arnold.