A CORRELATION BETWEEN VOCABULARY MASTERY AND STUDENTS' READING COMPREHENSION (A Study to the Grade XII Students of SMA Negeri 1 Padang Bolak)

ASRIANI HASIBUAN[1], APRIDA IRMAYANA[2]
SARI SEPTIANI RAYA SIREGAR[3]

Institut Pendidkan Tapanuli Selatan

E-mail: hasibuanasriani@gmail.com
sariraya06@gmail.com

Abstract: *The objectives of this research are to know whether there is any significant correlation between vocabulary mastery and students' reading comprehension at the grade XII students of SMA Negeri 1 Padang Bolak.This research uses descriptive method with pre-test post-test design. The population is all of the twelve grade students which consist of 4 classes with 135 students.Technique sampling that used on this research is simple random sampling and the number of the sample consists of 34 students. In collecting the data, the researcher uses multiple choice test to get the data of the students' vocabulary mastery and reading comprehension. The researcher uses statistical analysis, the formula that will be used is Pearson formula (correlation of Product Moment). Based on the data analysis, it is found that that r_{xy} (the correlation between x variable and y variable) was 0.363 and r_t (r_{table}) product moment df as number ($N-n_r = 34-2 = 32$) is known that there was not number 32 in the table at interval 5%. So, the writer takes the nearest number and it is number 30, it is 0.349. It shows that $r_{xy} > r_t$ (0.363 > 0.349). It means there is a significant correlation between vocabulary mastery and reading comprehension at the XII grade students of SMA Negeri 1 Padang Bolak.*

Keywords: correlation, reading comprehension, vocabulary mastery

Abstrak: Tujuan penelitian ini adalah untuk mengetahui: apakah ada korelasi yang signifikan antara penguasaan kosakata dan pemahaman membaca siswa pada siswa kelas XII SMA Negeri 1 Padang Bolak. Penelitian ini menggunakan metode deskriptif dengan desain pre-test post-test. Populasi adalah semua siswa kelas dua belas yang terdiri dari 4 kelas dengan 135 siswa. Teknik sampling yang digunakan pada penelitian ini adalah simple random sampling dan jumlah sampel terdiri dari 34 siswa. Dalam mengumpulkan data, peneliti menggunakan tes pilihan ganda untuk mendapatkan data penguasaan kosakata dan pemahaman membaca siswa. Peneliti menggunakan analisis statistik, rumus yang akan digunakan adalah rumus Pearson (korelasi Product Moment). Berdasarkan analisis data, ditemukan bahwa r_{xy} (korelasi antara variabel x dan variabel y) adalah 0,363 dan r_t (r tabel) produk saat df sebagai angka ($N-nr = 34-2 = 32$) diketahui bahwa tidak ada angka 32 dalam tabel pada interval 5%. Jadi, penulis mengambil angka terdekat dan itu adalah nomor 30, itu adalah 0,349. Ini menunjukkan bahwa $r_{xy} > r_t$ (0,363> 0,349). Artinya ada hubungan yang signifikan antara penguasaan kosakata dan pemahaman bacaan pada siswa kelas XII SMA Negeri 1 Padang Bolak.

Kata Kunci: korelasi, pemahaman membaca, penguasaan kosakata

I.   INTRODUCTION

Reading is one of four skills that must be mastered by students. From time to time people have wondered why reading is important. There seem so many other things to do with one's time. Reading is important for a variety of reasons, but it is important to realize that struggling with vital reading skills is not a sign a low intelligence.

Reading is important because it develops the mind. The mind is a muscle. It needs exercise. Understanding the written word is one way the mind grows in its ability. Basically, reading can be defined as a skill or activity of getting information from the book. In addition, reading is a process to understand a written text which means extracting the required information from it as efficient as possible. Reading is an active cognitive process of interacting with text and monitoring comprehension to establish meaning. It is important skill that has been mastered by people, especially by professional, such as a teacher, writer and journalist. The students should have some reading skill in learning activities.

Building reading ability is an essential goal for teachers at all grade levels. It provides students with some activities to help them to comprehend a text and to train them to be skillful readers. Students can read various materials in English and at the same time enlarge their vocabularies to improve their language competence.

Students will have problems reading unfamiliar texts and causing they read slowly and carefully, weighing and measuring every word, with a dictionary at their elbow as a life support system.

Reading comprehension and vocabulary mastery have a strong relationship. Vocabulary knowledge is crucial in reading comprehension and determining how well students in comprehend the texts. In the regard to this matter, this study attempts to

find out the ability of students' reading comprehension, students' vocabulary mastery and the correlation between students' reading comprehension and their vocabulary mastery.

Vocabulary is one of the purposes of teaching English as a foreign to Indonesian people is that they can read and understand the English text. To achieve those purposes, students need a lot of words to mastery vocabulary. Vocabulary is one of the most important to develop the skills in English. Vocabulary is a very important language aspect to master. It is impossible to learn a language without vocabulary. So in any language learning vocabulary is necessary.

Many students are lack of vocabulary mastery and its impact in reading comprehension. It seems from pre-test which is done before. Where the result of their achievement is 68 for total test of reading and vocabulary, while the standard of minimum value is 77. In fact, students can't reach the target expected. English vocabulary often becomes a problem for most high school and university students although they have studied English since elementary school. Sometimes the students always get difficulties to understand some words in context. When they asked to read the text in English, they will have difficult.

Therefore, the researcher wants to research relationship of the students' vocabulary mastery to students' reading comprehension. When they face the read the English text , they have little confidence in their vocabulary mastery. Impact, the students are not fluent in reading.

We have known how important the vocabulary mastery in reading activity. The problem of vocabulary is being studied in subject of vocabulary. Based on the previous explanation above, the researcher wants to conduct a research entitled "A

Correlation Between Vocabulary Mastery and Students' Reading Comprehension (A study to the grade XII students of SMA Negeri 1 Padang Bolak).

1. Reading Comprehension

There are a lot of definitions of reading comprehension. Reading comprehension is the process of understanding in analyzing and identifies meaning and information in a text.

According Akyol et al (2014:14) reading comprehension is one of the most important indicators of reading success. It can be obtain an idea of a student's comprehension skills by way of explaining read.

While Grabe & Stoller (in furqon 2013 : 70) define comprehension as processing words, forming a representation of general main ideas and integrating it into a new understanding. It suggests that comprehension is achieved when a reader successfully extracts the useful knowledge from a text and constructs it into a new understanding of their own.

Based on the explanations above, the writer concludes that reading comprehension is processing words, forming a representation of general main ideas and integrating it into a new understanding. So, based on the conclude, the indicators of reading comprehension are topic, topic sentence, main idea and supporting details.

a. Topic

Topic is the subject that the selection is about. Belmont and Sharkey (2011:225) said that topic is a specific area marked out of for discussion. It means that topic is usually called in the discussion of the text.

Then Gunning Thomas G (2010 : 25) said that topic is a subject. It means that topic is like person, thing, animal and so on which discussed in the context.

Based on the explanations above, the writer concludes that topic is the person, place, idea, object, or event the author wants to explore with readers. Usually topic is an information structure of a sentence.

b.Topic Sentence

A topic sentence is a sentence that captures the meaning of the entire paragraph or group of sentences. It tells what the passage is mainly about. According to Flemming (2011 : 182) Topic sentences are general sentences that broadly state the point of the paragraph. It means that point out statement of the main idea as like reasons, facts, details and other.

Belmont and Sharkey (2011 : 225) said that the topic sentence is the most general sentence of the paragraph, and it provides focus for entire passage. It means that topic sentence give the general information from of the text.

Based on the explanations above, the writer concludes that Topic sentences are general sentences that broadly state the point of the paragraph which give information generally.

c. Main Idea

Main idea is one of the most important aspects of good reading comprehension. According Flemming (2011 : 179) main idea is the central message or point of the paragraph. Main idea usually the author's comment on or statement about the topic.

Beech (2006:6) main idea is the key point in the paragraph. It means that main idea is overall message and point of paragraph where readers are expected to take from a reading.

Based on the explanations above, the writer concludes that main idea is the central message or point of the paragraph and a summary statement that includes details or ideas in selection.

d. Supporting Details/Idea

A paragraph contains facts, statements, examples-specifics which guide us to a full understanding of the main idea called supporting details. According to Flemming (2011 : 242) supporting details are more specific sentences that explain or prove the topic sentence by providing reasons, examples, studies, definitions, etc. It means that supporting details support the main idea.

Venzon et al (2010:4) said that supporting idea is the most important idea and it is often the first or last sentence of the paragraph. Supporting idea help to understand the main idea and points important in the text.

Based on the explanations above, the writer concludes that supporting details are more specific sentences that explain or prove the topic sentence by providing reasons, examples, studies, definitions, etc.

2. Definition of Vocabulary

Vocabulary is one of the important things in language learning besides sound, and grammar.   According to Weiner (2014:436) vocabulary is used in its everyday sense as a set of words. Where they come from, how they change, how they relate to each other and how we use them to view the world. It means that vocabulary is a tool to communicate with others.

Neuman & Dwyer (2009 : 385) said that Vocabulary can be defined as words we must know to communicate effectively; words in speaking (expressive vocabulary) and words in listening (receptive vocabulary). It

means that vocabulary is used in speaking and listening as communicate effectively.

Based on the explanations above, the writer concludes that vocabulary is a total member of words in a language that is used by a person. Vocabulary as a tool to communicate with others. Based the explanation, the indicators of vocabulary mastery are noun, verb, adjective and adverb.

a. Noun

Noun is a part of speech that identifies a person, place, thing, or idea. According Dykes (2007 : 22) the word 'noun' comes from Latin *nomen* meaning 'name'. A noun is the name of a thing. Everything that exists has a name, whether you can see it or not.

While according Stobbe (2008: 1) states that a noun is one of the most important words you use when speaking and writing. He notes that a noun is word to name a person, place, or thing; a quality, idea, or action. Nouns are incredibly important in spoken and written language.

Based on the explanations above, the writer concludes that noun is word to name a person, place, or thing; a quality, idea, or action. Nouns are incredibly important in spoken and written language.

b. Verb

Verb is the important in a sentence, because verb shows to do something to someone or something (noun). According Dennis (2016 : 21-26) verb is the word that shows the action of subject in sentences and changes the meaning of sentences. Verbs also help other verbs for mood voice and tense.

According Olsen (2009 : 1) that verb is express an action or state of being, examples : enjoy, run think, read, dance, am, is, are, was, were. Verb is a form of activity that we often do every day.

Based on the explanations above, the writer concludes that verb is word that shows the action of subject in sentences and changes the meaning of sentences.

c. Adjective

One of the most important components of a sentence is the <u>adjective</u>. According Dykes (2007 : 53) said that adjective is from Latin *ad jacere* meaning'throw to' or 'add'. In the grammatical sense, this means to add the characteristics of something, i.e. to qualify it. It means that adjectives a part of grammar that has different structure.

Regarding Pustet (2006 : 60) point out that adjectives can be defined at various of the organization of language, in particular, at the levels of morph syntax, semantics, syntactic usage. It means that adjective is one of the most important things in a grammar and has an important point in its influence as in the form of morph and syntax.

Based on the explanations above, the writer concludes that adjectives attributive when they pre-modify the head of a noun phrase; likewise, they are predicative when they function as subject complement or object complement.

d. Adverb

Adverb is a part of speech that provides greater description. While Crystal (in Bochari, 2016 : 2) argues that adverb is used to qualify any part of speech, except noun or pronoun. It means that adverb is a condition which give the statement in every speech.

Dykes (2007 : 62) An adverb is a word that adds meaning to any other word, except a noun or pronoun (that being the job of an adjective). It means that adverb is as a complement to explain something.

Based on the explanations above, the writer concludes that adverb are part of grammatical (or functional) category of parts of speech that adds meaning to any other word, except a noun or pronoun.

II.   METHODOLOGY OF RESEARCH

The location of this research is at SMA Negeri 1 Padang Bolak. It is located on Jl. SM Raja, Kecamatan Padang Bolak, Kabupaten Padang Lawas Utara. The name of headmaster is Rustam Efendi S.Pd. and the English teacher is Hotmaria, S.Pd.

The informants of this research were XII grade MIA1 students of SMA Negeri 1 Padang Bolak which consist 34 students. This research conducted based on quantitative research. Sample was taken by using simple random sampling. The data were collected in test and documentation.

III.   RESULT

1. Students' Vocabulary Mastery Score

After getting the data of this research, the writer analyzed the independent variable (vocabulary mastery). The data showed the X variable or vocabulary mastery has the lowest score, it was 65, the highest score was 90, the median was 80, and the mode was 80, and the mean score was 77.2, it categorize "Good". The researcher describes the data calculation as follows:

Table 3
Score of mean, median, mode of vocabulary mastery

No	Items	Score
1	Mean	77.2
2	Median	80
3	Mode	80

Based on the table above, the writer found that the result of elements of paragraph mastery is categorized good for learning English. To be clearer, the result of mean score can be seen in the following figure.
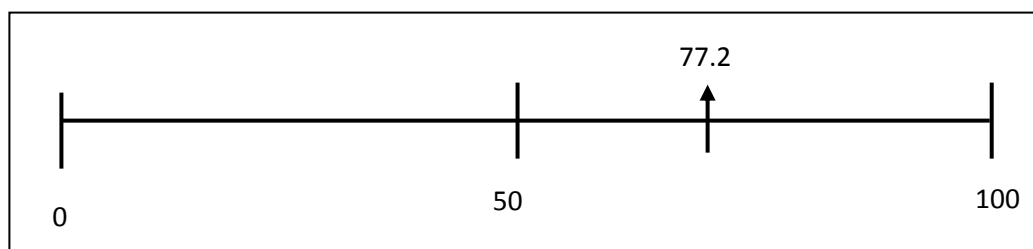

Figure 1 : Position of Means score of Vocabulary Mastery at the XII   Grade Students of SMA Negeri 1 Padang Bolak

Table 4.
Frequency Distribution of Vocabulary Mastery at the XII Grade Students of SMA Negeri 1 Padang Bolak

No	Interval Class	Frequency	Cumulative Frequency	Percentages
1	65-69	4	4	11.8%
2	70-74	6	10	17.6%
3	75-79	6	16	17.6%
4	80-84	10	26	29.4%
5	85-89	5	31	14.7%
6	90-94	3	34	8.8%
	Total	34		100%

Based on the table above, it can be seen that the students got score 65-69 there are 4 students, 70-74 there are 6 students, 75-79 there are 6 students, 80-84 there are 10 students, 85-89 there are 5 students, and 90-94 there are 3 students.

From the calculation, it is known that mean score of vocabulary mastery categorized "Good". It can be seen from the students' answer in the test of indicators of vocabulary mastery as follows :

a. The score of the XII grade students of SMA Negeri 1 Padang Bolak in indicator of verb is 68.2. It can be shown from the answer are 232 of   340   are   true.   It   is predicted "Enough".

b. The score of the XII grade students of SMA Negeri 1 Padang Bolak in indicator of noun is 85. It can be shown from the answer are 289 of 340   are   true.   It   is predicted "Very Good".

c. The score of the XII grade students of SMA Negeri 1 Padang Bolak in   indicator of adverb is 71.8. It can be shown from the answer are 244 of   340 are true. It is predicted "Good".

d. The score of the XII grade students of SMA Negeri 1 Padang Bolak in indicator of adjective is 83.8 . It can be shown from the answer are 285   of 340 are true. It is predicted "Very Good".

From the explanations above, it can be seen that in noun and adjective mastery of the students at XII grade of SMA Negeri 1 Padang Bolak is very good, while the weakness are verb and adverb mastery.

In order to make description the data of indicators in vocabulary mastery the writer presents the histogram below:
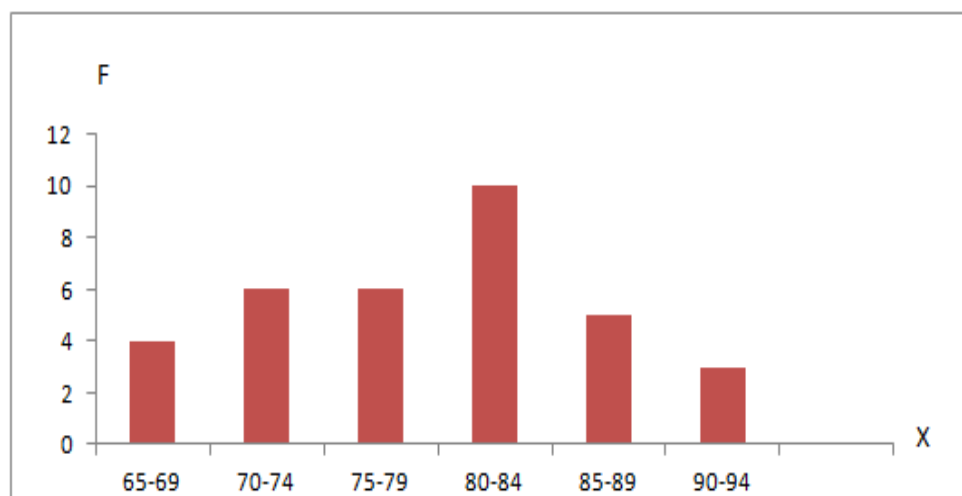
Figure 2: Histogram of vocabulary mastery at the XII Grade Students of SMA Negeri 1 Padang Bolak

2. Students' Reading Comprehension Score

After getting the data from the students about reading comprehension at the XII grade students of SMA Negeri 1 Padang Bolak , the writer analyzed the result or score of dependent variable (students' reading comprehension).

The result of students' reading comprehension test is shown as follows : the lowest score was 50, the highest score was 90, the median was 75, and the modus was 80, and the mean score was 73.8, it categorized "Good". The writer describes the data calculation as follows:

Table 5.
Score of Mean, Median and Mode of Students' Reading Comprehension

No	Items	Score
1	Mean	73.8
2	Median	75
3	Mode	80

Based on the table above, the writer found that the student ability in reading comprehension is good, it can be seen from the students' score. It showed that some of the respondents can pass the test was given by the writer.

73.8

0   50   100

Figure 3:Position of Means score of Students' Reading Comprehension at the XII Grade Students of SMA Negeri 1 Padang Bolak

Table 6.
Frequency Distribution of Students' Reading Comprehension at the XII Grade Students of SMA Negeri 1 Padang Bolak

No	Interval Class	Frequency	Cumulative Frequency	Percentages
1	50-56	2	2	5.9%
2	57-63	8	10	23.5%
3	64-70	4	14	11.8%
4	71-77	13	27	38.2%
5	78-84	6	33	17.6%
6	85-91	1	34	2.9%
	Total	34		100%

Based on the table, it can be seen that the students that got score 50-56 there is 2 student, 57-63 there is 8 student , 64-70 there are 4 students, 71-77 there are 13 students, 78-84 there are 6 students, and 85-91 there are 1 students.

From the calculation, it is known that mean of reading comprehension categorized "Enough". It can be seen from the students' answer in the test of reading comprehension as follows:

a. The score of the XII grade students of SMA Negeri 1 Padang Bolak in indicator of topic is 63.2. It can be shown from the answer are 215 of   340   are   true.   It   is predicted "Enough".

b. The score of the XII grade students of SMA Negeri 1 Padang Bolak in   indicator of topic sentence is 69.7. It can be shown from the answer are   237   of   340   are true. It is predicted "Enough".

c. The score of the XII grade students of SMA Negeri 1 Padang Bolak in   indicator of main idea is 78.8. It can be shown from the answer are 268   of 340 are true. It is predicted "Good".

d. The score of the XII grade students of SMA Negeri 1 Padang Bolak in   indicator of supporting details/idea is 66.5. It can be shown from the   answer are 226 of 340 are true. It is predicted "Enough".

In order to make description the data of indicators in reading comprehension the writer presents the histogram below:
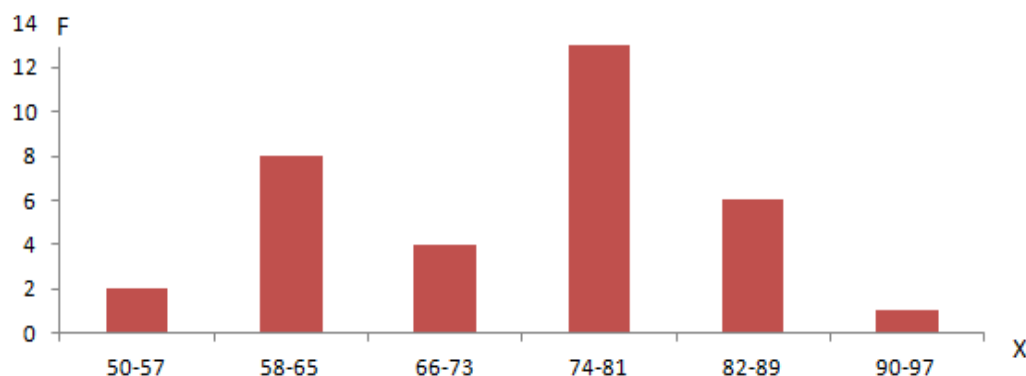

Figure 4: Histogram of students' reading comprehension at the XII   Grade Students of SMA Negeri 1 Padang Bolak

IV.   DISCUSSION

Based on the data which was collected, the data would analyze to prove if there was a significant correlation or no significant correlation between vocabulary mastery and students' reading comprehension. The writer used the hypothesis, whether was received or rejected by using the formula of statistic. The data were

taken from the students of this research, which were calculated to make a hypothesis testing.

In order to know the result of hypothesis testing, the writer calculated the data by using "r" product moment formula, which was proposed by Pearson. From the calculation of correlation of product moment above, it can be known that r_{xy} (the correlation between x variable and y variable) was 0.363 and r_t (r_{table}) product moment df as number (N-n_r = 34-2 = 32) was known that there was not number 32 in the table at interval 5%. So, the writer taken the nearest number and it was number 30, it is 0.349. It showed that $r_{xy} > r_t$ (0.363 > 0.349).

Based on the calculation above, it can be concluded that there was a significant correlation between vocabulary mastery and students' reading comprehension at the XII grade students of SMA Negeri 1 Padang Bolak.

CONCLUSIONS

After collecting the data about vocabulary mastery and reading comprehension of the XII grade students of SMA Negeri 1 Padang Bolak can be seem as follows:

1. The result of the data description shows that mean of vocabulary mastery is 77.2, it can be categorized "good".

2. The result of the data description shows that mean of reading comprehension is 73.8, it can be categorized "good".

3. Based on the data analysis, it is found that that r_{xy} (the correlation between x variable and y variable) was 0.363 and r_t (r_{table}) product moment df as number (N-n_r = 34-2 = 32) is known that there was not number 32 in the table at interval 5%. So, the writer takes the nearest number and it is

number 30, it is 0.349. It shows that $r_{xy} > r_t$ (0.363 > 0.349). It means there is a significant correlation between vocabulary mastery and reading comprehension at the XII grade students of SMA Negeri 1 Padang Bolak.

REFERENCES

Akyol, H., Yildirim, K., Ates, S., Çetinkaya, Ç., & Rasinski, T. V. (2014). *Assessment of Reading.* Ankara: Pegema Publishing.

Beech, Linda. 2006. Main idea and summarizing. U.S.A: Scholastic Inc.

Belmont and Michael Sharkey. 2011. THE EASY WRITER Formal writing for academic purposes. Pearson Australia.

Bochari, Siska et al. 2016. An Error Analysis of Conjunctive Adverbs Used   by the Tenth Grade Students in Writing Descriptive Text. *E-Journal   of   English Language Teaching Society (ELTS).* Vol. 4 No. 2– ISSN 2331-1841.

Dennis & Kamluejirachai. 2016. A Study of Verb Used in an English News   Online Website. *International Journal of Research Grantahaalayah.* ISSN- 2350-0530(O) ISSN- 2394-   3629(P).

Dykes, Barbara. 2007. Grammar for everyone. Practical tools for learning and teaching grammar. National Library of Australia Cataloguing-in-   Publication data.

Flemming, Larine E. 2011. Reading for Result. Boston, USA : Canada.

Furqon, Fajar.2013. Correlation Between Students' Vocabulary Mastery   and   Their Reading Comprehension. *Journal of English and   Education.* 1(1), 68-80.

Gunning, Thomas. 2010. Reading Comprehension Boosters. 100 Lessons   for Building Higher-Level Literacy. United States of America: Jossey-Bass`.