RELATIONSHIP BETWEEN STUDENTS' READING COMPREHENSION AND VOCABULARY MASTERY IN SMPN 5 PONTIANAK

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Abstract

English learning to enhance students' ability to communicate, both orally and in writing. Insight on the reading was affected by several factors - vocabulary mastery. Based on pre-research observation at SMPN 5 Pontianak, found that students find it difficult to understand the meaning of the read words that correspond to the reading context, thus preventing students from understanding the meaning in the sentence or paragraph in the reading process. This research aims to find out the relationship between reading comprehension and vocabulary mastery of the second-grade students at SMPN 5 Pontianak. It used a quantitative approach and the kind of this research is a correlation. The sample is 8A, with as many as 32 students. Data collection for vocabulary mastery and reading comprehension is taken with the testing techniques of multiple choice. The reading comprehension test was taken from the students' LKS, while the vocabulary test was adopted by 'Test Your English Vocabulary in Use'. Testing the research hypothesis using a product correlation technique. Based on the statistical calculation, known that vocabulary and reading comprehension mean is 81.72 and 83.58 in the good category, and the correlation coefficient is 0.681 with sig.5% is 0.361 and degree of freedom is 30. Therefore, the coefficient correlation is greater than the r-table. It can be concluded that alternative hypotheses are accepted. So there is a positive correlation between reading comprehension and vocabulary mastery in second grade at SMPN 5 Pontianak. This suggests that vocabulary mastery variables can better predict reading comprehension.

INTRODUCTION

Reading is one of the scientific probabilities that is meant to text information. In English, reading skill is a process carried out by the reader to get the message the author desires to convey in the form of phrases/written language (Tarigan, 2008). In this case, the reader can take the message

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transmitted from a reading. Besides that, it can improve and maintain cognitive function and memory. Furthermore, Yamin (2006) states that reading is a way of obtaining information presented orally to be known and become students' knowledge. Furqon (2013) says that a person will be more creative and intelligent if their reads a lot. This means, reading is an essential skill that must be mastered because it includes many aspects that benefit students, such as increasing knowledge and insight. In addition, almost all subjects are related to reading. Therefore, student achievement also affects college students' reading skill. So, reading skill is an important thing that need to be taken into considered.

Rasinski & Hoffman (2003) said reading leads to reading engagement for students and comprehension. It means that because reading results are used to measure capability and understanding, use and reflect on written texts to acquire desires, as well as to develop understanding and capability, and participate in society.

Vocabulary is one component that is taught to students. Vocabulary has a role in reading comprehension due to the fact the greater students master in vocabulary, the better their reading comprehension will be. Supported by Wainright (2007) states that vocabulary is an essential thing in reading. In short, students master vocabulary; when reading, the student will automatically know to contents of the reading because vocabulary has essential factors. Therefore, vocabulary becomes a component that students must master to understand what the student read. In addition, the levels in vocabulary mastery are as follows; level A1 with 600 words as much 85%, level A2 with 1600 words as much 91%; level B1 with 2700 words as much 95%; level C1 with 4700 words is 96,13%, and level C1+ with 5000 words as much as 96,30 % (Fabien Snauwaert, 2014).

Vocabulary has a role in reading comprehension. This is supported through Ratnawati (2006), states that vocabulary is the main component taught along with reading. So that in the task, students can be helped to understand the reading or capture the contents of the message. In addition, Altalhab (2019) states that learning vocabulary helps students listen, read, write, and speak more effectively. Consequently, vocabulary is an essential factor in developing language skills.

From the above perspective, vocabulary is essential in reading comprehension activities. Both orally and in writing in the language. Vocabulary can affect and support one's reading ability. Mastery of vocabulary in a language is related to mastery of the meaning of a word. Vocabulary mastery cannot be interpreted only by its pronunciation but also by understanding its meaning. In addition, vocabulary mastery also helps students with other skills. In other words, learners do not only memorize but

also communicate well. Thus, students needing more vocabulary will need help understanding the text.

Many students need help understanding and reading texts in Indonesia because their mother tongue is Indonesian. In addition, students need more vocabulary to understand reading correctly. This means vocabulary influences reading.

Pre-research at one of the schools in Pontianak, researcher found that students with lack of vocabulary mastery needed help in reading comprehension. In addition, when do the worksheet, there is a difference between doing with the help of a dictionary and not using a dictionary.

Ade (2016) suggests that hindering learning new vocabulary and failing to develop vocabulary can hinder improving reading skills. In addition, Susilo Wati (2018) states that students need help understanding the meaning of each words by following the reading content, thus hindering understanding of meaning in larger units. All things considered, many learners experience difficulties in reading. The student needs help understanding the text. Understanding meant that students must understand all aspects of reading.

However, vocabulary mastery is a fundamental component that students learning a language must possess. Indeed, vocabulary is a sentence-forming element both orally and in writing. In this case, the purpose of the study was to find out the relationship between reading comprehension and vocabulary mastery in school.

Based on the cases above, the researcher should consider the important relationship between students' reading comprehension and vocabulary mastery related to inferring meaning in English subjects in related schools. So, the researcher is interested in research "Relationship between Students' Reading Comprehension and Vocabulary Mastery at SMPN 5 Pontianak".

LITERATURE REVIEW

Reading is one of the basic skills to gain knowledge. In some activities, we can find out the latest information and news by reading. We can read from many sources such as magazines, newspapers, books, articles on the internet, and others. If we read a lot then we will get a lot of useful information, and vice versa. Reading is also very important in the world of education, especially for students. If a student has good reading skills, it allows students to have a better opportunity to follow their lessons. Reading is a process carried out by the reader to get the message the author wants to convey through a word, media, or written language (Tarigan, 2008). A process that demands that a group of words that constitute a single unit can be seen at a glance, and the meaning of the individual words known. If it is not fulfilled, then the explicit or implied message will not be captured or understood by the reader so the

reading process cannot be carried out properly (Hodgson in Tarigan, 2008). In short, one that aims to get information through the media being presented.

Reading is a cognitive process that aims to obtain information contained in writing (Dalman, 2014). This means reading is a thinking activity to find meaning or understand the contents of the text. Meanwhile, according to Widyastuti (2017), reading is an activity that involves listening and observing. This ability begins when they explore by flipping through a book which is a communication tool for children when expressing their needs. Based on several definitions by experts, it can be concluded that reading is an activity to get important information in the text.

Bauer (2001: 34) defines vocabulary as being about words – where words come from, how they change, how they relate to one another, and how we use them to see the world. Moreover, Stahl (2005) state that vocabulary as knowledge. Furthermore, Jackson and Amvela (2000) say that synonymous are the terms vocabulary, lexis, and lexicon. In addition, all the words that people know or use (Hornby, 2006). It means vocabulary is all available words, both active vocabulary used by readers and writers and passive vocabulary used by readers and listeners

Swahnnel (1994:656) defines mastery as comprehensive knowledge or use of a subject or instrument. Thereafter, mastery is learning or understanding something completely and having no difficulty in using it (Porter, 2001:953). Meanwhile, Hornby (1984:777) defines mastery as skill or thorough knowledge. In short, mastery is expertise in certain areas to supplement knowledge. According to Lewis and Hill (1990:12) vocabulary mastery is important for the student. Without mastering vocabulary, students would be faced with difficulty both in learning and in English. Schmitt and McCarthy (1997:326) suggest that receptive and productive knowledge may prove the only realistic way to measure depth of vocabulary knowledge. Additionally, receptive knowledge is the vocabulary that the student directly recognizes and understands. Concurrently, productive knowledge is words that are understood, correct in speech, and constructive in both speaking and writing. To find out the extent to which a student understands vocabulary, there might be several tests. The aim to measure understanding as well as the use of words used in speaking or writing.

METHODS

In this research, the researcher used a quantitative approach. There are two variables in this study, the independent variable is vocabulary mastery (X) and the dependent variable is students' reading comprehending. In sum, the researcher aims to find out whether there is a relationship between students' reading comprehending and vocabulary mastery.

This research at second (8th) grade of SMPN 5 Pontianak on Sultan Hasanudin, Western Pontianak District, Pontianak City, and West Kalimantan. The research conducted on June, 2023. The population of this research used second grade in SMP N 5 Pontianak, there are have seven classes in the second grade, the academic year 2022/2023. So, the research selected one randomly class with simple random technique. The sample is class 8A.

For this research, the researcher used the test. It was divided into two parts. Another key thing to remember is Multiple Choice as the test format. In this section, the test consisting of 20 questions. In the instrument measure student reading comprehension and their vocabulary mastery. The reading test which consists of 20 questions the number of each test item is 20 items of multiple-choice type test with four choices: A, B, C, or D. Here are the steps have been taken in data collection:

1. The researcher took the name of students for the sample.
2. The researcher gave instruction how to answer the question.
3. The researcher gave reading comprehension test consists of 20 multiple choice items in 40 minutes.
4. The researcher gave vocabulary mastery test consists of 20 multiple choice items in 40 minutes.
5. Scoring the reading comprehension and vocabulary test.

In completing the data, the next step in this research is technique data analysis the researcher gave two tests to students in second grade junior school in Pontianak for the academic year 2022/2023. For the first, the researcher calculates mean of both variable with descriptive statistic, test of normality and calculate coefficient correlation with SPSS Statistic 22 and formula.

RESULTS

Data has been collected to see how vocabulary mastery, student reading comprehension, normality, and the relationship between vocabulary mastery and reading. The researcher concluded that the result of an average score vocabulary mastery was 81.72. Then, the researcher found that the result of an average score reading comprehension was 83.59. The coefficient correlation found by researchers is 0.681. In sum, the correlation between vocabulary mastery and reading comprehension was strong.

The Descriptive Statistic of Vocabulary Mastery

Table 1. The Descriptive Statistic of Vocabulary Mastery

Descriptive Statistic	
N Valid	32
Missing	0
Mean	81.72
Std. Deviation	12.353

Minimum	55
Maximum	100
Sum	2615

According to the table Descriptive Statistic, it can be seen that the data of vocabulary mastery is 32, with a value of 2615. The average vocabulary mastery score is 81.72, with a minimum score of 55 and a maximum score of 100. With a standard deviation is 12.353, it means that data is closing in on

No	Classification	Interval Score	Frequency	Percentage
1	Poor	< 55	1	3%
2	Fair	56 – 65	5	16%
3	Fairly Good	66 – 75	3	9,5%
4	Good	76 – 85	9	28%
5	Very Good	86 – 95	11	34%
6	Excellent	96 – 100	3	9,5%
	Total		**32**	**100%**

average value so that the variable has relatively homogenous data. In sum, vocabulary mastery in second grade at SMPN 5 Pontianak with the category was good. The table are as follows:

Table 2. The Classification of Vocabulary Mastery

Based on the table above, it known that belongs to poor at 3%, fair at 16%, fairly good at 10%, good at 28%, very good at 34%, and excellent at 9%.

The Descriptive Statistic of Reading Comprehension

Table 3. The Descriptive Statistic of Reading Comprehension

Descriptive Statistic	
N Valid	32
Missing	0
Mean	83.59
Std. Deviation	11.997
Minimum	60
Maximum	100
Sum	2675

Based on the data obtained, it is known that 32 data with a value amount of 2675. The average score for reading comprehension is 83.59. In addition, with a minimum value is 60, and a maximum is 100. Then, according to the statistical calculations in the table, it can be seen that the standard deviation is 11,997. It means, the standard deviation is small, so the data is spread close to average score. Thus, the variable has relatively homogeneous

data. The student's reading comprehension focuses on meaning inference to second grade at SMPN 5 Pontianak. After discussing this with the teacher, the researcher gives the student a test. After the results were obtained, the researcher concluded that students are good at reading comprehension.

Table 4. The Classification of Reading Comprehension

No	Classification	Interval Score	Frequency	Percentage
1	Poor	< 55	-	-
2	Fair	56 – 65	3	9%
3	Fairly Good	66 – 75	10	31%
4	Good	76 – 85	5	16%
5	Very Good	86 – 95	10	31%
6	Excellent	96 – 100	4	13%
	Total		32	100%

The Normality Test

In correlation research, the conditions for such test are that must make normality test and linearity test, which are present:

Table 5. Normality Test

| One Sample Kolmogorov-Smirnov Test	
Asymp. Sig. (2 – tailed)	.200

To determine whether the data obtained were normal, the researcher used the normality test of Kolmogorov – Smirnov. The basis of making-decision in the normality test of Kolmogorov – Smirnov:
If sig value. > 0.05, then the data is a normally distributed.
If a sig value. < 0.05, then the data is not a normally distributed.

Based on the table of One – Sample Kolmogorov-Smirnov, it has been noted that the sig value is 0.200. Thus, the data is reasonably distributed according to the basis of making – making in the normality test of Kolmogorov - Smirnov. Thus, the assumption of normality has been fulfilled. Even, according to scatterplot, the data is a normally distributed.

Figure 1. The Scatter Plot.
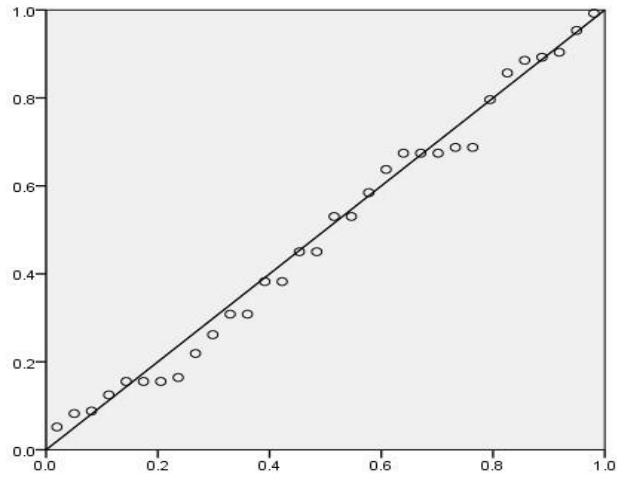
The Correlation Between Reading Comprehension and Vocabulary Mastery

This data establishes a correlation between reading comprehension and second-grade vocabulary mastery at SMPN 5 Pontianak. To see the relationship between reading comprehension and vocabulary mastery, the researcher presented the table below:

Table 6. Normality Test

Aspects	Means Score	N	Sig. (2-tailed)	Correlation (rxy)
Vocabulary (x)	81.72			
		32	.000	rxy = 0.681
Reading (y)	83.59			
**. Correlation is significant at the 0.01 level (2-tailed).				

Subsequently in the table above, the researcher found a relationship between reading comprehension and vocabulary mastery with r_{xy} (coefficient correlation) = 0.681 with sig (2 – tailed) 0.00, from a total of 32 data. In the interpretation table, level 0.60-0.799 was a strong correlation. It means that the student was good in vocabulary, so in their reading, it was also good.

After the researcher found the value of r_{xy} = 0,681. The researcher refers to the interpretation suggested by Sugiyono (2012:193) as follows:

Table 7. Interpretation

"r" score product moment	Interpretation
0.00-0.19	Very weak
0.20-0.39	Weak

0.40-0.59	Strong enough
0.60-0.79	Strong
0.80-1.00	Very strong

Based on the table above, the researcher makes three conclusions about the basis of making-decision in Pearson's correlation analysis.

1. Assuming sig.2 tailed

The sig value (2-tailed) between reading and vocabulary is 0.000 < 0.05, it means there is a significant correlation between the reading comprehension and vocabulary mastery variables.

2. Based on Pearson Correlation

From the result of Pearson Correlation, it is known for r_{xy} was 0.681 with degree of freedom (df = N – nr) is 32 – 2 = 30, a sig.5% was 0.361(in r-table Pearson Product Moment). In other words, r-counts 0.681 > r-table 0.361, hence the relationship between reading comprehension and vocabulary mastery.

3. r-count on the data is positive, so the relationship between the two variables is positive. Reading comprehension is increasingly associated with vocabulary, the opposite is true or vice versa.

The researcher made assumption of hypothesis, there are two kinds of hypothesis, as follows:

H_0 (Null Hypothesis)	: There is no relationship between students' reading comprehension and vocabulary mastery in second grade students of SMPN 5 Pontianak.
H_a (Alt. Hypothesis)	: There is relationship between students' reading comprehension and vocabulary mastery in second grade year students of SMPN 5 Pontianak.

To know the hypothesis is accepted, the researcher compared the value of r_{xy} with r-table. As seen in statistic calculation above, the value of r_{xy} was 0.681 and r-table with df = 32-2= 30. If significant of 5% is 0.361 and significant of 1% is 0.463. It can be known that, r_{xy} (0.681) bigger than r-table both significant level 0f 5% (0.361) and 1% (0.463). As a result, H_0 (Null Hypothesis) is rejected and Ha (Alternative Hypothesis) is accepted. In the other words, there is relationship between students' reading comprehension and vocabulary mastery in second grade year students of SMPN 5 Pontianak.

Table 8. Hypothesis Test

N	rxy	r-table significant		Ha	H0
		5%	1%		
32	0.681	0.361	0.463	Accepted	Rejected

DISCUSSION

In this research, the researcher formulated a set of problem for discussion. First of all, the researcher had collected data relating to reading comprehension and vocabulary mastery. In obtaining the data, the researcher used tests as an instrument. Furthermore, the numerical data which has been acquired and then analyzed used several phases, such as conducting a descriptive analysis for both variables, the normality test, and discovering the value of the r-product using Pearson Product Moment on the research. As described in the previous chapter, this research problem to find out the correlation between reading comprehension and the student's vocabulary mastery in the second grade of SMPN 5 Pontianak. Thus, the purpose of this study is to find out there is wheatear or not a correlation between reading comprehension and vocabulary mastery in the second grade at SMPN 5 Pontianak. After analysing the data acquired by the researcher by finding the r_{xy} formula of the product's moment, it was discovered that there was a correlation between reading comprehension and vocabulary mastery in the second grade at SMPN 5 PTK students.

Based on the findings, the results show that reading comprehension and vocabulary mastery could be categorized both in the second grade of SMPN 5 Pontianak. It is proven by product analysis to get an r-count. According to the SPSS calculations as well as using the manual formula, it was discovered that the r-count is 0681. The researcher compared the values at the r-table by using significant levels of 5% and 1%. With r-table (df= 32-2=30), it is known that r_{xy}(0.681) is higher than r-table at both levels of 5% (0361) and 1% (0,463). So it could be concluded that there is a positive relationship between reading comprehension and vocabulary mastery based on 0.681 coefficient correlation in the second grade of the SMPN 5 Pontianak. With coefficient value, the correlation is strongly categorized. This is supported by normality tests which indicate that the significance of the obtained data is normal. Additionally, it shows the significant linearity of the relationship between the two variables, which is also an indication of the significant relationship between reading comprehension and vocabulary mastery. Even, within the scatter plots also show that the relationship between reading comprehension and vocabulary

mastery was directly related. The interpretation is the better the student could master the vocabulary, the better the comprehension of reading would be.

From the findings and discussions, the researcher concluded that vocabulary was an important part of the reading comprehension. It could be seen that vocabulary mastery could affect reading comprehension, since vocabulary mastery affected reading comprehension. Thus, the teacher must have an alternative way to improve that matter. This is supported by a research of Dasep Samsul Bahri (2018) entitled "The Correlation Between Students' Vocabulary Mastery And Their Reading Comprehension At The Seventh Grade Students' Of MTS Daarul Ihsan", mentions that increasing students' reading comprehension, the teachers should teach students vocabulary because vocabulary has a strong relationship with reading comprehension. Even, the same with I Nyoman Satria Indra Pebriawan, Basturi Hasan, Sudirman (2015) in the research entitled "The Correlation between Vocabulary Mastery and Students' Reading Comprehension", they say that learners must have a good vocabulary because a lot of vocabulary is important in learning a language. And also supported by Sedita (2005) stated that vocabulary enlargement is essential to reading comprehension because it can indicate how well students are at understanding the text. Furthermore, mastering a lot of words enabled students to understand the text with ease. Vocabulary was more complex, as vocabulary mastery not only understood words or meanings but understood how they were heard and used in specific situations.

CONCLUSION

The relationship between the variables of reading comprehension and vocabulary mastery in second grade at SMPN 5 Pontianak was proved to be correlated (significant). This proves that there was a relationship or correlation between reading comprehension and vocabulary mastery in second grade at SMPN 5 Pontianak. The vocabulary mastery in SMPN 5 Pontianak earn an average score of student vocabulary is 81.72. The average score for vocabulary was good. Meanwhile, the percentage result is poor at 3%, fair at 16%, fairly good at 10%, good at 28%, very good at 34%, and excellent at 9%. The reading comprehension of second-grade, SMPN 5 Pontianak earns an average score of student reading comprehension is 83.59. It means that the average score of reading comprehension was good. The category 7% is fair, fairly good 37%, good 19%, very good 37%, and excellent 19%. The correlation between vocabulary variables and reading comprehension in second grade at SMPN 5 Pontianak, with a degree of 5% value would be 0.681 or 68.1%. So, there is a strong with positive correlation.

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