



Korelasi Antara Penguasaan Kosakata Siswa Dengan dan Pencapaiannya Dalam Pemahaman Membaca

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Abstrak

Penelitian ini berkaitan dengan korelasi antara penguasaan kosakata siswa dan prestasi mereka dalam pemahaman bacaan mereka. Data diambil dari 33 siswa dari kelas X-TKJ SMK As Sakiyah Sliyeg. Penulis menggunakan metode kuantitatif oleh Pearson Product Moment. Dari perhitungan dengan menggunakan rumus product moment, diketahui bahwa koefisien korelasi dari penelitian ini adalah 0,8409. Dapat disimpulkan bahwa ada tingkat korelasi positif dan tinggi antara penguasaan kosakata siswa dan prestasi mereka dalam membaca pemahaman. Penelitian ini menggunakan level signifikansi 5%. Dari hasil pengujian hipotesis, ditemukan bahwa $r_{count} > r_{table}$ 0,3494. Berdasarkan fakta tersebut, dapat disimpulkan bahwa Hipotesis Alternatif (H_a) diterima dan Hipotesis Null (H_0) ditolak. Jadi, ada korelasi yang signifikan antara penguasaan kosakata siswa dan pemahaman membaca prestasi mereka

Kata Kunci: Korelasi, Penguasaan Kosakata, dan Pemahaman Membaca

The Correlation Between Students' Vocabulary Mastery And Their Achievement In Reading Comprehension

Abstract

This research deals with the correlation *between students vocabulary mastery and their achievement in their reading comprehension*. The data were taken from 33 students from class X-TKJ of SMK As Sakiyah in Sliyeg. The writer used quantitative method by *Pearson Product Moment*. From the calculation by using *product moment formula*, it was found out that the coefficient correlation from this research is 0,8409. It can be concluded that there is positive and high correlation level between students' vocabulary mastery and their achievement in reading comprehension. This research used significance level 5%. From the hypothesis testing result, it was found that $r_{count} > r_{table}$ 0,3494. Based on the fact, it can be concluded that Alternative Hypothesis (H_a) is accepted and the Null Hypothesis (H_0) is rejected. So, there is significance correlation between students' vocabulary mastery and their achievement in reading comprehension.

Keywords: *Correlation, Reading comprehension, Vocabulary Mastery*

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INTRODUCTION

Vocabulary is one of language aspects which should be learnt, besides four skills of basic language skills ; listening, reading, writing and reading. Vocabulary is knowledge involves knowing the meaning of words. So it means that, vocabulary deals with the meaning (John,2000,p.16) Then, mastery itself means the compressive knowledge. So, mastery of vocabulary is compressive knowledge to recognize, understand, and produce a lot of words and their meaning. Mastery of vocabulary is very important in learning language, because we learn to speak, write , read and listening, we should know vocabulary first (Cameron, 2001,p.75). The acquisition of vocabulary is very essential for successful language use because without extensive vocabulary, will not able to use structure and function they may have learned for communication comprehend (Nunan,1991,p.171). That is why mastering of vocabulary is very important for students. Because mastery of vocabulary is able to help students use language skillfully.

In line with Lehr & Osborn who explain that to understand a text, we need to find the key words of the text (2000). By doing this strategy, students can cover their vocabulary weaknesses since vocabulary knowledge is one of the major factors that influence reading comprehension (Roehrig and Guo, 2011). Another research from Sedita (2005) cited in Furqon (2013) who states that vocabulary knowledge is crucial in reading comprehension and determining how well students are able to comprehend the texts. Then, it is supported by Ibrahim , Sarudin and Muhamad from the research, they concluded that Vocabulary size is one important factor that enhances reading comprehension.

Based on the research about vocabulary mastery and reading above, it shows that they have a close relation. That is why this research attempts to find out the relationship between students' reading comprehension and vocabulary mastery. Based on the statement above, the writer formulates the problem is "Whether students' reading comprehension has a correlation with their vocabulary mastery in tenth grade students of As Sakienah Vocational High School in Sliyeg.

MATERIAL AND METHODOLOGY

This parts explains the matters related to research methodology arranging from research design, participants, data collecting and analysis, and time and procedures.

This research used quantiative research and correlation analyses methodis considered appropriate. Because this research is to find out the correlation between vocabulary mastery and reading comprehension. In line with Hatch & Farhady (1982) state that correlation is a statistical technique that can show whether and how strong pairs of variables are related. It is usually used to correlate two variables based on its correlation coefficient value. It's useful to describe and find out the significant of the correlation between those two variables, variable X and variable Y. The first variable is score of the Students' Vocabulary Mastery which is taken by how many vocabularies that they know from the test given; it is considered as independent variable (Variable X). The second variable is their Achievement in Reading Comprehension score which is taken from their comprehension in reading with the texts; we considered it as dependent variable (variable Y).

The participants of this research was 33 students from class X-TKJ of SMK As Sakienah in Sliyeg. The data got from students' vocabulary scores and reading comprehension scores. They are analyzed and correlated in order to find out the correlation between students'

vocabulary mastery and achievement in reading comprehension. The researcher uses the correlation formula by Pearson Product Moment Correlation Formula to test the significant correlation between them.

FINDING AND DISCUSSION

Findings and discussion are presented based on formulation of the problem in this research.

A. Findings

The first test on each students was presented 25 questions of vocabulary test, the kind of question consist of multiple- choices, synonym, antonyms, matching and fill in the blank questions. And the second test each student was present 25 multiple choice questions of reading test which consist of narrative text, descriptive text, recount text, news item, etc.

1. The reality of Vocabulary test

To analyze the score of vocabulary test, the writer used formula:

$$Score = \frac{R}{N} \times 100$$

Where:

R = the result from the students or right answer of student

N = account of the questions (25 question)

For example the result of Adi Tonang:

$$\begin{aligned} \text{Score} &= \frac{18}{25} \times 100 \\ &= 72 \end{aligned}$$

Table 4.1
The result of vocabulary test

No	Name	Value (R)	Vocabulary Score (x)
1	Adi Tonang	18	72
2	Anan	10	40
3	Ayu Ariska	4	16
4	Bella Frasillia	22	88
5	Candra Erwawan	5	20
6	Elsih Yuengsih	17	68
7	Eva Juriyah	15	60
8	Fajar	11	44
9	Fitriyah	20	80
10	Jamalludin	12	48
11	Kuniah Gerhana Poel	10	40
12	M. Fiki Suratul U.B	7	28
13	M. Nursyihabuddin U.A	14	56
14	M. Yakub	19	76
15	Muksin Fadil	5	20
16	Nurdiana	13	52
17	Purdanto	12	48
18	Pegiyanto	12	48
19	Reksa	10	40
20	Sandy Haryanto	7	28
21	Sri Ningsih	23	92

22	Su'ud	10	40
23	Suwinci	21	84
24	Suwitno	17	68
25	Tigin	12	48
26	Tuniri	23	92
27	Turyani	7	28
28	Ugiyono	12	48
29	Wahyudin	20	80
30	Wasiroh	13	52
31	Yani	16	64
32	Yuma Dahlani	7	28
33	Yuliana Tantriyani	22	88
Accounts		446	1784

From the data above we can obtain the information that the lowest score in vocabulary test is 16 and the highest score is 92 the result of vocabulary test is a variable X.

Based on the result above, the writer used this formula to calculate the mean score of vocabulary test:

$$M = \frac{\sum x}{N} = \frac{1784}{33} = 54$$

Mean is amount of student's vocabulary score divided amount of students. Based on the calculation of table data, the amount of score is 446 divided into amount of student is 33. So the result of mean is 54.

The writer used the criteria from standard of evaluation to evaluate the students' grade and the level of vocabulary score in "Petunjuk Pelaksanaan Penelitian" (Depdikbud, 1990:10) for the student's score there are five classifications of students' score in vocabulary as follow:

Table 4.2. The Classification of Students' Score of Vocabulary

Scores	Grades	Classifications
86 – 100	A	Excellent
66 – 85	B	Good
46 – 65	C	Fair
26 – 45	D	Poor
Under 25	E	Failed

Source : Depdikbud, 1990:10

Based on the mean of the students score in vocabulary test is 54, so it can be said that the vocabulary is still fair.

2. The reality of reading comprehension test

Table 4.3. The result of Reading Comprehension test

No	Name	Value	Reading Comprehension Score (Y)
1	Adi Tonang	18	72
2	Anan	18	72
3	Ayu Ariska	9	36
4	Bella Frasillia	18	72
5	Candra Erwawan	5	20

6	Elsih Yuengsih	18	72
7	Eva Juriyah	20	80
8	Fajar	13	52
9	Fitriyah	22	88
10	Jamalludin	15	60
11	Kuniah Gerhana Poel	11	44
12	M. Fiki Suratul U.B	10	40
13	M. Nursyihabuddin U.A	15	60
14	M. Yakub	20	80
15	Muksin Fadil	3	12
16	Nurdiana	15	60
17	Purdanto	14	56
18	Pegiyanto	8	32
19	Reksa	10	40
20	Sandy Haryanto	10	40
21	Sri Ningsih	19	76
22	Su'ud	10	40
23	Suwinci	23	92
24	Suwitno	14	56
25	Tigin	11	44
26	Tuniri	22	88
27	Turyani	8	32
28	Ugiyono	11	44
29	Wahyudin	22	88
30	Wasiroh	5	20
31	Yani	19	76
32	Yuma Dahlani	13	52
33	Yuliana Tantriyani	23	92
Account		472	1888

From the data above we can attain that the minimum score in reading comprehension test is 12 and the highest one is 92. The result of this reading test is as variable Y which will be influenced by variable X.

Based on the result above, the writer used this formula to calculate the mean score of reading comprehension test:

$$M = \frac{\sum x}{N} = \frac{1888}{33} = 57,21$$

Mean is amount of student's reading comprehension score divided amount of students. Based on the calculation of table data, the amount of score is 1888 divided into amount of student is 33. So the result of mean is 57,21 or fulfilled into 57.

Evaluating the students' grade and the level of reading comprehension score the writer used the criteria from standard of evaluation in "Petunjuk Pelaksanaan Penelitian" (Depdikbud, 1990:10) for the student's score there are five classifications of students' score in reading comprehension as follow:

Table 4.4
The Classification of Students' Score of Reading Comprehension

Scores	Grades	Classifications
86 – 100	A	Excellent
66 – 85	B	Good
46 – 65	C	Fair
26 – 45	D	Poor
Under 25	E	Failed

Source : Depdikbud, 1990:10

Based on the mean of the students score in reading comprehension test is 57, so it can be said that the reading comprehension is still fair.

3. Statistical Analysis

There are some steps to calculate the statistical analysis:

3.1. Determining the value of $\sum X$, $\sum Y$, $\sum x^2$, $\sum y^2$, $\sum xy$ of two tests

Table 4.5
The Result of Product Moment

No	Name	X	Y	x ²	y ²	Xy
1	Adi Tonang	72	72	5184	5184	5184
2	Anan	40	72	1600	5184	2880
3	Ayu Ariska	16	36	256	1296	576
4	Bella Frasila	88	72	7744	5184	6336
5	Candra Erwawan	20	20	400	400	400
6	Elsih Yuengsih	68	72	4624	5184	4896
7	Eva Juriyah	60	80	3600	6400	4800
8	Fajar	44	52	1936	2704	2288
9	Fitriyah	80	88	6400	7744	7040
10	Jamalludin	48	60	2304	3600	2880
11	Kuniah Gerhana P	40	44	1600	1936	1760
12	M. Fiki Suratul UB	28	40	784	1600	1120
13	M. Nursyihabuddin	56	60	3136	3600	3360
14	M. Yakub	76	80	5776	6400	6080
15	Muksin Fadil	20	12	400	144	240
16	Nurdiana	52	60	2704	3600	3120
17	Purdanto	48	56	2304	3136	2688
18	Pegiyanto	48	32	2304	1024	1536
19	Reksa	40	40	1600	1600	1600
20	Sandy Haryanto	28	40	784	1600	1120
21	Sri Ningsih	92	76	8464	5776	6992
22	Su'ud	40	40	1600	1600	1600
23	Suwinci	84	92	7056	8464	7728
24	Suwitno	68	56	4624	3136	3808

25	Tigin	48	44	2304	1936	2112
26	Tuniri	92	88	8464	7744	8096
27	Turyani	28	32	784	1024	896
28	Ugiyono	48	44	2304	1936	2112
29	Wahyudin	80	88	6400	7744	7040
30	Wasiroh	52	20	2704	400	1040
31	Yani	64	76	4096	5776	4864
32	Yuma Dahlani	28	52	784	2704	1456
33	YulianaTantriyani	88	92	7744	8464	8096
Accounts		1784	1888	112768	124224	115744

3.2 Determining coefficient correlation from two variable (X and Y)

$$\begin{aligned} \text{Variable X : } M &= \frac{\sum x}{N} \\ &= \frac{1784}{33} = 54 \end{aligned}$$

$$\begin{aligned} \text{Variable Y : } M &= \frac{\sum y}{N} \\ &= \frac{1888}{33} = 57,21 \end{aligned}$$

3.3. Determining coefficient of correlation from variable X and Y. the technique of data analysis of Pearson product Moment correlation, from tree result of raw table, it can be found that:

$$\begin{aligned} \sum x &= 1784 \\ \sum y &= 1888 \\ \sum xy &= 112768 \\ \sum x^2 &= 124224 \\ \sum y^2 &= 115744 \end{aligned}$$

Here are the descriptions of calculation:

$$\begin{aligned} r_{xy} &= \frac{N(\sum xy) - (\sum x)(\sum y)}{\sqrt{N\sum x^2 - (\sum x)^2} \sqrt{N\sum y^2 - (\sum y)^2}} \\ r_{xy} &= \frac{33(112768) - (1784)(1888)}{\sqrt{33 \cdot 124224 - (1784)^2} \sqrt{33 \cdot 115744 - (1888)^2}} \\ r_{xy} &= \frac{3721344 - 3368192}{\sqrt{4099392 - 3182656} \sqrt{3819552 - 3564544}} \\ r_{xy} &= \frac{353152}{\sqrt{(916736)(255008)}} \\ r_{xy} &= \frac{353152}{\sqrt{233775013888}} \\ r_{xy} &= \frac{353152}{483503} = 0.84089 \end{aligned}$$

3.4 Determining the interpretation of coefficient correlation by using the criteria scale, the writer used the criteria from Sugiyono (2002: 183) as follow:

Table 4.6
Correlation Coefficient Interpretation

Coefficient Interval	Correlation Degree
0,00 to 0,199	Very low
0,20 to 0,399	Low
0,40 to 0,599	Moderate
0,60 to 0,799	High
0,80 to 1,00	High to very high

Source : Sugiyono (2002: 183)

In accordance of the criteria scale above, it can be seen that the result of coefficient correlation of this research (0,84089 or fulfilled into 0,8409) in on the high to very high level (0,80 to 1,00)

4 Hypothesis Test

There are some steps in doing the hypothesis test are as follow:

1. Determining r_{count}

$$r_{count} = r_{xy}$$

$$r_{count} = 0,8409$$

2. Find out degrees of freedom (df)

$$df = N - nr$$

$$df = 33 - 2$$

$$df = 31$$

To know the correlation of them in 5% significant, the writer used r_{table} with df formula $df = N - nr$

Where :

df = degrees of freedom

N = total number of respondents

nr = number of variable (X and Y)

3. Determining score r_{table} with the level significance $5\% = 0.05$.

The writer has mentioned the hypothesis before, from the hypothesis the writer has criterion of hypothesis test:

If $r_{count} > r_{table}$ the alternative hypothesis (Ha) is accepted and Null Hypothesis (Ho) is rejected. It means there is correlation between students' vocabulary mastery and their achievement in reading comprehension.

If $r_{count} < r_{table}$ the alternative hypothesis (Ha) is rejected and Null Hypothesis (Ho) is accepted. It means there is no correlation between students' vocabulary mastery and their achievement in reading comprehension.

Based on the calculation, it is known that r_{table} of $df = 31$ is 0.3494.. So the result is r_{count} is 0.8409, $0.8409 > 0.3494$ ($r_{count} > r_{table}$). Based on the fact, it can be conclude that alternative hypothesis (H_a) is accepted and Null Hypothesis (H_o) is rejected. From this interpretation, we can say that there is positive correlation between students' vocabulary mastery and their achievement in reading comprehension at tenth grade of students in SMK AS – SAKIENAH Boarding School. It means that if the students have high score in vocabulary, they can get high score in reading comprehension also.

B. Discussion

From the result above, it showed that there is positive correlation between Vocabulary mastery and Reading comprehension. The result was gotten from collectting and analyzing the data using Product Moment Formula. There are two test used in this research. They were vocabulary test and reading comprehension test. The value of correlation coefficient obtained 0,84089 which is higher than r_{table} (0.3494). Then the criterion of 0,80 to 1,00 are considered high to very high.

Based on the analysis of the data and the testing of hypothesis, in which the criterion is whether the hypothesis is accepted or not. H_a is accepted if r_{count} higher than r_{table} and H_o is rejected if r_{count} lower than r_{table} . Then. The result of calculation alternative hypothesis (H_a) is accepted and Null Hypothesis (H_o) is rejected. Therefore we know that there is a correlation of two variables. It means that the two variables (X,Y) are highly influenced each other.

The results above also related to the previous research. The first result was conducted by Ibrahim, Sarudin and Muhamad (2016) from Malaysia with the title "The Relationship between Vocabulary Size and Reading Comprehension of ESL Learners". From the calculation, this research found the coefficient correlation between Vocabulary size and Reading comprehension is 0.641. The other one, was conducted by wulandari, Harha and Husna (2015) from Bung Hatta University with the title "THE CORRELATION BETWEEN THE SECOND YEAR STUDENTS' VOCABULARY MASTERY AND THEIR ABILITY TO COMPRHEND NARRATIVE TEXT AT SMAN 1 LUBUK ALUNG" . The result of r-calculated of this research was 0.75, while the value of r-table with level of significance 0.05 and degree of freedom ($df = n-2$) was 0.362. It means that the r-calculated was higher than r-table ($0.75 > 0.362$).

The difference between my research and previous research is as follows ; this research with research from Ibrahim has differences in its participants, where Ibrahim uses participants from higher education levels. This Research with research from Wulandari has differences in the type of text type (narrative text) that used in reading comprehension tests. In this sresearch not only using narrative text but, descriptive, news items, etc.

Based on the real fact, this research was successful to prove the correlation between students' vocabulary mastery and their achievement in reading comprehension. From this hypothesis testing, it can be conclude that there is a significant correlation both of them.

CONCLUSION

Conclusion

Based on finding as already discussed above, the researcher points out the following conclusions:

1. There was a significant correlation between the tenth grade students' vocabulary mastery and their achievement in reading comprehension at SMK AS – SAKIENAH Boarding School in academic years 2017/2018.
2. The correlation between the tenth grade students' vocabulary mastery and their achievement in reading comprehension at SMK AS – SAKIENAH was high correlation. It means that if the students vocabulary is good, their reading comprehension is good too. They are highly influenced each other.

Suggestion

After drawing the inferences, there are several suggestions that hopefully can give some ideas for the readers especially for English teacher or researchers.

1. For English teacher should support the students' expectation about reading and arouse their interest to increase their vocabulary mastery and their achievement in reading comprehension.
2. For Researchers, the further researchers can focus on other issues in reading, such as it will be better take the experiment research about the effect of learning vocabulary to reading comprehension

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