The Relationship Between Vocabulary Learning Strategies and Reading Comprehension Based on Gender

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Abstract

This research aimed to determine The Relationship between Vocabulary Learning Strategies and Reading Comprehension based on the Gender. This is a quantitative research using the correlation method. Data were collected from online questionnaires and test. This research uses bivariate correlation analysis as a research design. Respondents in this research were 8th grade students of SMP Muhammadiyah 4 Kebomas of the 2020/2021 academic year in Gresik, East Java, Indonesia. This study found that students' Vocabulary Learning Strategies had a positive and significant correlation to students' Reading Comprehension with the results indicate that the significance value in male students' is 0.828 > 0.265 (rtable value) and the results indicate that the significant value in female students' is 0.751> 0.265 (rtable value) at the level of significance 0.05.

Keywords: *Vocabulary learning strategies; reading comprehension; gender.*

1.Introduction

In the twenty-first century English is recognized as a very important (Luo, Lin, Chen, & Fang, 2015) as English is increasingly becoming the second language used as the language of international communication (Kuo, Chu, & Huang, 2015). Therefore, in countries where English is not a native speaker or strongly supportive of the learner in learning English, start with what learners learn about vocabulary. English is a second language that has received a lot of attention from students', this has led to the emergence of several vocabulary strategies with these strategies having a positive influence and greatly affecting the student learning process (Harmon, Antuna, Juarez, & Wood, 2018) the more knowledge vocabulary and structure, the better it is for students' (Susanto & Fazlinda, 2016). In foreign language learning, it is necessary to encourage students to vary their language strategies while studying vocabulary to improve the quality of the learning process (Baskin, Iscan, Karagoz, & Birol, 2017). Based on (Elashhab, 2019) a Vocabulary learning strategy is a process that students use in finding new vocabulary and unknown vocabulary, where students' can organize their learning, achieve independence and develop their communication competencies.

Learning vocabulary is considered as a basic foundation or as the main foundation for learning a second language (Sun, Yin, Amsah, & O'brien, 2018). A sovereign, when the vocabulary is very limited will interfere with

communication, reading comprehenson and success in communicating very little. It is important for students to use what strategies are suitable for them in mastering and determining the meaning of new or unknown vocabulary to support text understanding. Wrong language learning strategies can avoid improvement during the language learning process (Gillies, 2016). Whereas the use of vocabulary strategies will increase success in language skills, for learning a second language in the long-term students need to develop efficient strategies for themselves because they need more control over their own learning, which is needed to develop competence. Vocabulary has been recognized as a form of knowledge that is mandatory to meet the needs of students in learning English where students need vocabulary learning strategies (Asgari & Mustapha, 2011). Vocabulary learning strategies are a subgroup of foreign language pedagogy by looking at learning strategies as specific behaviors used to help students understand (O'Malley & Chamot, 1990).

Most of the research on vocabulary learning strategies has the aim of determining which vocabulary memorization techniques are most effective, developing taxonomy of strategy use, and identifying the use of vocabulary learning strategies that distinguish good and bad language learners. Based on the taxonomy (Schmitt, 2010) studying vocabulary learning strategies where literature in language learning there are several taxonomies of vocabulary learning strategies (Gu & Johnson, 1996). Taxonomic theory (Schmitt, 2010) consists of four groups of strategies: Social, Memory, Cognitive, and Metacognitive. Schmitt's taxonomy standardization has objectives that can be arranged so that it can be used to find answers from students' easily, therefore the theory of vocabulary technology learning strategies can be applied to students' who have a variety of educational backgrounds, target languages and are rich and sensitive to learning strategies allows it to be compared with other language learning skills (Kafipour & Naveh, 2011). Many students' match English vocabulary with the first language, but they focus on the literals of one word without learning the meaning of the vocabulary in the context of the reading, so it is difficult for them to understand the reading text when they are aware of the meaning of the vocabulary in the text of reading. This is due to students' who do not understand vocabulary learning strategies in learning English. If they know their own strategy, they will try to learn other strategies they don't use. This process will increase their enthusiasm for learning English. Supported by (Muhaimin, Suharsono, & Munir, 2017) that in determining the meaning of vocabulary that is not yet known by students', an idea strategy is needed as an important idea in learning foreign language vocabulary to support reading comprehension. The main purpose of the vocabulary learning strategy (VLS) is to help students understand the text; therefore reading has an important role in learning English where reading is used as a tool to acquire new vocabulary.

There are suggestions from previous researchers (Muhaimin, Suharsono, & Munir, 2017) that there are those who emphasize the relationship between Vocabulary Learning Strategies (VLS) and Reading Comprehension with different coverage such as gender in the study population. (Gavriilidou & Psaltou-Joycey, 2019) emphasized that there are several factors that influence the type and frequency of language learning strategies, such as proficiency level, age, gender, motivation, learning style, field of study/career orientation, culture, beliefs, conditions, language planning, and language are being studied. Gender is the importance of being male or female, gender also affects reading (Thresia, 2017). Agreeing to (Oxford, 1997), these strategies can be influenced by factors like motivation, attitude, gender, learning styles, etc. Moreover, the utilization of vocabulary learning strategies has been found to influence understudies 'performance in language learning (Sarani & Kafipour, 2008) Therefore, the researchers took this fault to compare the relationship between Vocabulary Learning Strategies (VLS) and Reading Comprehension based on gender. In learning, of course, a male student and a female student have their respective abilities; have learning styles and strategies, especially in learning English. There are many differences in the brains of men and women when they learn. This is because the human brain has several areas with different functions that can impact learning processes and abilities. Therefore, the researcher wanted to see the vocabulary learning strategies used by both male and female students' in vocabulary learning strategies when they understood a reading and saw about the differences between male and female students. The importance of a strategy in determining the meaning of words does not lead to the idea that students should be equipped with several strategies to learn vocabulary and to acquire words to support students' comprehension of the reading text. Therefore, students are better prepared, have the most meaning of words in the reading text, and tend to comprehend better when they talk more about vocabulary (Cervetti, Wright, & Hwang, 2016)). However, it is also supported by the condition of schools where more than dozens of countries are due to the COVID-19 outbreak, currently in Indonesia schools are implementing policies for distance teaching-learning activities or online learning, which supports students' in teaching and learning activities, namely using the Google form which involves a lot of reading skills (Putri, et al., 2020). So, with this opportunity the researcher tries to find a relationship between vocabulary learning strategies and reading comprehension based on gender. Does the vocabulary learning strategy correlate with students' reading comprehension or not at SMP Muhammadiyah 4 Kebomas.

Many researchers believe that vocabulary learning strategy should be applied and taught to students' so that they can improve vocabulary because it is the basis of all language skills, but requires a lot of attention because of its complexity. Previous researchers discussed the Vocabulary Learning Strategy (VLS) carried out by (Gorgoz & Tican, 2020) and found a moderate, positive, and significant correlation between the total score of high school students' self-regulation strategies and vocabulary learning strategies in foreign languages. Also, according to (Nayan, Hariharan, & Krishnasamy, 2019) the relationship between Contrastive Lexical Competence (CLC) and vocabulary learning strategy (VLS) is strongly positive and this relationship is statistically significant. Besides (Noprianto & Purnawarman, 2019) Vocabulary Learning Strategy made a significant contribution to students' knowledge of affixes. There are several ways in which researchers reveal strategies that are beneficial to students'. However, from some of the previous studies above related to

Vocabulary Learning Strategies which are associated with various variables, research was conducted to prove that vocabulary learning strategies are very important in encouraging language learning to be correlated. Learning strategies must be carried out a lot by students because this learning is more useful than individual strategies carried out in EFL or ESL (Letchumanan, Muthusamy, Govindasamy, & Farashaiyan, 2016).

2.Method

In this study, researcher used purposive sampling technique. Purposive sampling is a data sampling technique with certain considerations in mind (Sugiyono, 2016) . Purposive Sampling determines the considerations or determined criteria that must be met by the samples used in the study. The research method is using the purposive sampling technique using probability sampling. The criteria taken for this study are as follows:

a.   The school has taught English to students' as a compulsory subject in 8th grades.
b.   Teaching vocabulary and reading comprehension have been applied to students in 8th grades.

From the above criteria, the researcher used all eighth-grade students' because they had met the above criteria with a total of 53 students'.

Table 1: Sample of 8th Grade Students Muhammadiyah 4 Kebomas

Class	Number of Students	
	Male	Female
A	14	17
B	12	10
Total	26	27

Data collection in this study was collected using questionnaires and tests. (1) Students' Vocabulary Learning Strategies Questionnaire and (2) Reading Comprehension Test.

Students' Reading Vocabulary Learning Strategies Questionnaire

The Questionnaires was adopted based on (Bennett, 2006); (Kudo, 1999); (Schmitt, N, 1997); (Oxford R. , 1990). Researchers use questionnaires in the form of online questionnaires, students are asked to open the web and answer questions in a list that has been provided by researchers, using a Likert scale that contains four-point alternative answers, particulary. "always (selalu), often (sering), sometimes (kadang-kadang), never (tidak pernah).

There are 30 items, and the statement is based on the Taxonomy Vocabulary Learning Strategy (TVLS) based on the (Schmitt, 2010) in which there are five group strategies, namely; Determination Strategy (DET), Social Strategy (SOC), Memory Strategy (MEM), Cognitive Strategy (COG), dan Met cognitive Strategy (MET).

Students' Reading Comprehension Test

The Questionnaires was created by the researcher based on the K-13 syllabus for the 8th grade in the first semester. The researcher made the test according to the lesson and every item that was matched with the syllabus and also the researcher looked at references from the internet and English textbooks for grade 8th in the first semester. The book that is used as a reference from the official website entitled "When English Rings a bell".

Instrument development is pursued in several ways, namely, (1) translating instruments by linguists; (2) instrument testing; and (3) testing the validity and reliability of the instrument.

The instruments were translated by a linguist and distributed to 15 students that is equivalent to the study population to check its validity and reliability. The instruments were distributed in online via Google Form. Then, the instruments were tested using Spearman correlation and Cronbach Alpha. If the instruments are valid and reliable, it can be used for this research.

The researcher used bivariate correlation analysis as a research design because this study aims to find the relationship between two variables. Researchers also used descriptive statistics to describe the data obtained into clearer and more detailed information. Then, Pre-requirement test will be analyzed with a normality test using One-Sample Kolmogorov-Smirnov Test. And to test the hypothesis, the researcher used a simple linear regression analysis to find the contribution of the significance of reading vocabulary learning strategies to the reading comprehension and Spearman correlation coefficient is used to analyze the relationship between two variables, namely; student's vocabulary learning

strategies and students reading comprehension. To make it easier to calculate data, researchers used statistical software, the IBM SPSS23 Statistics program, which is used to solve business and research problems.

3. Findings and Discussion

The researcher will present and describe the results of the field researcher 'findings that have been carried out on 8th grade students of SMP Muhammadiyah 4 Kebomas, including:

Students' Reading Interest on Short Story

Based on the data found by distributing questionnaire and descriptive analysis as tool to calculated data by used SPSS and Microsoft Excel. The data are represented into the table:

Table 2: Mean for Male and Female students of VLS Categories
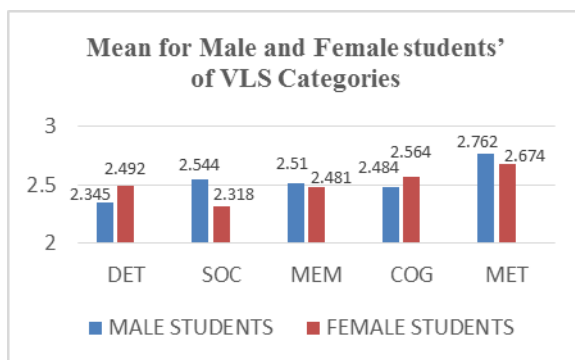
Based on the data above, the results of the five categories of vocabulary learning strategies are: In male students' found Determination Strategy (M = 2.345), Social Strategy (M = 2.544), Memory strategy (M = 2.51), Cognitive strategy (M = 2.484) and Met Cognitive strategy (M = 2,762). While, in female students' found Determination Strategy (M = 2.492), Social Strategy (M = 2.318), Memory strategy (M = 2.481), Cognitive strategy (M = 2.564) and Met-Cognitive strategy (M = 2.674). From the two gender types, male and female students' have the same large percentage of categories used in the vocabulary learning strategy, the gender uses the Met-Cognitive Category with different mean values., namely: Male students' is (M = 2.762) and Female students' is (M = 2.674). However, the very small percentage used in vocabulary learning strategies has differences between the two genders. It can be seen in Male students a very small percentage is found in Determination Strategy which is only (M = 2.345), while in Male students a very small percentage is found in Social Strategy only (M = 2.318).

Table 3: Female Students' Vocabulary Learning
Strategies Statistics

Total

N	Valid	27
	Missing	0
Mean		2.63
Median		3.00
Mode		3
Minimum		2
Maximum		3

a. Multiple modes exist. The smallest value is shown

Based on the result of questionnaire acquired that the average of Female students' vocabulary learning strategies of 8th grade SMP Muhammadiyah 4 Kebomas is good. Student's vocabulary learning strategies score of 2.63. This happens because students answer the questions given on the questionnaire well.

Table 4: Male Students' Vocabulary Learning
Strategies Statistics

Total

N	Valid	26
	Missing	0
Mean		2.50
Median		2.50
Mode		2[a]
Minimum		2
Maximum		3

a. Multiple modes exist. The smallest
value is shown.

Based on the result of questionnaire acquired that the average of Male students' vocabulary learning strategies of 8th grade SMP Muhammadiyah 4 Kebomas is good. Students vocabulary learning strategies score of 2.50. This happens because students answer the questions given on the questionnaire well.

Table 5 : Female Students' Reading
Comprehension Statistics

Total

N	Valid	27
	Missing	0
Mean		75.74
Median		82.50
Mode		82.5[a]
Minimum		40
Maximum		97.5

a. Multiple modes exist. The smallest
value is shown.

Table 6 : Male Students' Reading
Comprehension Statistics

Total

N	Valid	26
	Missing	0
Mean		76.92
Median		80
Mode		80[a]
Minimum		50
Maximum	95	

a. Multiple modes exist. The smallest
value is shown.

The result of the test acquired that the average of Female and Male Students' Reading Comprehension of 8th grade SMP Muhammadiyah 4 Kebomas is good. The average Female students score is 75.74 and Male students score is 76.92. This happens because students feel that reading comprehension can contribute to students' word growth, the importance of a strategy in determining the meaning of vocabulary to learn vocabulary and to acquire foreign words to

support reading comprehension (Muhaimin, Suharsono, & Munir, 2017) language reading comprehension, many unknown words that students encounter in a text can interfere with their reading comprehension. The goal of reading comprehension can be achieved if the reader is good at interacting with texts. When receiving readings students develop meaning or ideas in the text in their learning process (Iskandar, 2017)

Correlation between Students' Reading Interest on Short Story and Students' Translation Ability

The next step is measuring the correlation between students' vocabulary learning strategies and students' reading comprehension. The data taken to calculate the correlation between students' vocabulary learning strategies and students' reading comprehension were obtained from the score results of vocabulary learning strategies questionnaire and reading comprehension test. The following are the steps:

a. Normality Test

Normality test is a test that serves to detect data distribution. If the level of significance (p value> 0.05) the data will be normally distributed. In this test, there are two hypotheses as follows:

• Ho: data is normally distributed
• Ha: data is not normally distributed

Table 5: One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		53
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	3.37397695
Most Extreme Differences	Absolute	.116
	Positive	.059
	Negative	-.116
Kolmogorov-Smirnov Z		.116
Asymp. Sig. (2-tailed)		.071[c]

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.

The table above shows the results of the normality test using the Kolmogorov-Smirnov test. Based on the results of the normality test above, it is known that the significance value is 0.071> 0.05, it can be concluded that the data is normally distributed, or Ho is accepted.

b. Hypothesis Testing

The next step the researcher takes after conducting pre-requirement testing is hypothesis testing. The hypotheses in this study are:

Ho: $\rho = 0$ There is no correlation between students' vocabulary learning strategies and students' reading comprehension based on gander.

H1: $\rho \neq 0$ There is a positive and significant correlation between students' vocabulary learning strategies and students' reading comprehension based on gander.

To test the hypotheses, the researcher used simple linier regression and Spearman correlation coefficient.

1) Simple Linear Regression

In this study, the results of simple linear regression analysis can be seen as below:

Table 6: ANOVA[b]

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	11328.094	1	11328.094	975.977	.000[b]
Residual	591.953	51	11.607		
Total	11920.047	52			

a. Predictors: (Constant), Reading Interest on Short Story
b. Dependent Variable: Translation Ability

From the table above shows that the value of F count = 975.977 with b significance level of 0.000 <0.05, which means that there is an effect of the Vocabulary Learning Strategies variable on the Reading Comprehension variable.

2) Correlation Coefficient's Analysis

In order to find any possible correlation between male students' vocabulary learning and reading comprehension, the writer used Spearman correlation in SPSS to analyze the data. If (p-value < 0.05) there is significance correlation. The relationship may be positive or negative. Furthermore, Spearman correlation in this study can be seen as below:

Table 7: Correlations Male Students'

			VLS Male	Reading Comprehension Male
Spearman's rho	VLS Male	Correlation Coefficient	1.000	.828**
		Sig. (2-tailed)	.	.000
		N	26	26
	Reading Comprehension Male	Correlation Coefficient	.828**	1.000
		Sig. (2-tailed)	.000	.
		N	26	26

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

From the table above, it can be seen that the sig value shows 0.000 <0.05, which means that there is a significant correlation between vocabulary learning strategies and reading comprehension in male students.

Table 8: Correlations Female Students'

			VLS Female	Reading Comprehension Female
Spearman's rho	VLS Female	Correlation Coefficient	1.000	.751**
		Sig. (2-tailed)	.	.000
		N	27	27
	Reading Comprehension Female	Correlation Coefficient	.828**	1.000
		Sig. (2-tailed)	.000	.
		N	27	27

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

From the table above, it can be seen that the sig value shows 0.000 <0.05, which means that there is a significant vocabulary learning and reading comprehension in female students.

Interpreting the Results with Reference to Rough Standards

The final step is interpreting the hypothesis from the Spearman correlation coefficient whether there is a positive and significant correlation or not based on the standard 'r' category.

Based on the result of statistic calculation (see table 7), it indicates the significant value is 0.828. In the table significance of 5% the value for N = 53 is 0.265. From the rho table obtained from Spearman with significant results. So, the working hypothesis (H1) is accepted and the null hypothesis (Ho) is rejected. Based on standard categories indicates there is a very strong correlation between students' vocabulary learning strategies and students' reading comprehension in male students.

Meanwhile, based on the result of the female statistic calculation (see table 4.25), it indicates the significant value is 0.751. In the table significance of 5% the value for N = 53 is 0.265. From the rho table obtained from Spearman with significant results. So, the working hypothesis (H1) is accepted and the null hypothesis (Ho) is rejected. Based on standard categories indicates there is a strong correlation between students' vocabulary learning strategies and students' reading comprehension in female students.

4. Conclusion

Based on the result of the study can be drawn the conclusion that is, students' vocabulary learning strategies of 8th grade students' is declared good in male and female students', as well as students' reading comprehension also

declared good in male and female students. There is a positive correlation between students' vocabulary learning strategies and students' reading comprehension based on gender. Thus, vocabulary learning strategies support students' reading comprehension based on gender.

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