A comparative study on vocabulary learning strategies between male and female students toward their English vocabulary size

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ABSTRACT

This present study was aimed to find out whether there was any significant difference of vocabulary learning strategy preferences between males and females and to investigate whether there was a significant correlation between students' vocabulary learning strategies and their vocabulary size. The population was the first grade students of SMAN 1 Natar. There were 100 students as the sample. The instruments were the questionnaire and vocabulary size test by Schmitt and Clapham (2000). The result of *Independent Sample T-Test*calculation showed that p < 0.05. It means H_1 was accepted, that there was a significant difference of vocabulary learning strategies preferences between males and females students.

Keywords: gender, vocabulary learning strategies, vocabulary size

I. INTRODUCTION

Since English becomes a substantial language that learners need to use, they must have their own idea about learning English. The first thing that comes to people's mind when they talk about language must be "words". Words here are vocabulary. Ghazal (2016, p.84) indicates that vocabulary is central to language and is of great significance to language learners. Because of its importance, the learners need to learn vocabulary more. If students do not understand the meaning of the words in the text, they will have difficulties understanding the content. Ghazal (2016, p.84) states that vocabulary learning is one of the major challenges foreign language learners face during the process of learning a language. This causes learners need to use their own strategy to learn vocabulary.

The uses of learning strategies are able to help the students to avoid their difficulties in the learning process. Nevertheless, the use of the strategies will not be the same among them, because their individual differences such as gender, age, learning style, motivation, previous experience in language learning, and learner's belief.According to Oxford (1990), gender has a significant influence on language learning strategies use, female students use different strategies than male students, and female students use more strategies than males.

Considering the individual differences, female and male students might use different learning strategies. The appropriate vocabulary learning strategy selection will affect the learning process to be acquired effectively. The effective strategy will have an important role to make the learners get better achievement and better understanding about vocabulary itself. In reference to the explanation above, it is important to find the strategies to make the learning process more effective. It has found the fact that learners" vocabulary size is also different one another even though they learn at the same level and also with the same teacher but the results will be dissimilar. The difference of strategies might influence their vocabulary size.

Based on the statements above, the researcher was formulated the research question as follow:
1. Is there any significant difference on vocabulary learning strategies between male and female students?
2. Is there any significant correlation between students' vocabulary learning strategy and their English vocabulary size?

II. METHODS

The design used in this research is ex post facto design because there is no control group and no treatment to the sample but collecting the data by analyzing the comparison and correlation between cause and effect among the variables in the research. This research is quantitative descriptive since the data gathered are in form of number.

The subjects of this research are 100 second year students of SMAN 1 Natar. It consisted of 50 males and 50 female students. In determining the sample, the researcher used purposive sampling. The data collecting techniques are questionnaire and vocabulary size test. The researcher collects the data regarding to students' vocabulary learning strategies and their vocabulary size by giving vocabulary learning strategies questionnaire and vocabulary size test.

Then, the researcher analyzes the comparison between male and female students' vocabulary learning strategy by using Independent Sample T-Test. The researcher also analyzes the correlation between two variables by using Pearson Product Moment Correlation.

After finding the comparison, the researcher finds out the criterion of the hypothesis acceptance. Two hypotheses are proposed as follows H_1 ($p < 0.05$) and H_0 ($p > 0.05$). The researcher also finds out the criterion of the correlation hypothesis acceptance as follow H_1 is accepted if $r > 0.05$ and H_0 is rejected if $r < 0.05$.

III. RESULTS AND DISCUSSIONS

Result of comparative analysis of male and female students' vocabulary learning strategies preference

Below is the result of the significant different of the male and female students' vocabulary learning strategy.

Table 1. Comparative Analysis of Male and Female Students' Vocabulary Learning Strategies Preference

No.	Vocabulary Learning Strategy	Sig. (2 tailed)
1	Determination	.262
2	Social	.874
3	Memory	.855
4	Cognitive	.001
5	Metacognitive	.178
6	Overall	0.49

Since the p was lower than 0.05, it meant that male and female students were have significant difference in using vocabulary learning strategies, particularly in the cognitive strategy. On the other hand, the result showed that four out of five vocabulary learning strategies significant score were higher than 0.05, it was explained that male and female student were not have significant difference in the four strategies, those were determination strategy, social strategy, memory strategy and metacognitive strategy.

However, the Independent Sample T-test analyzed that in overall strategy showed that there was a different of students' vocabulary learning strategies. The probability value was 0.049 which meant that the value was not higher than 0.05. Although there are differences in the use of learning strategies, these differences are not significant. This can be caused by the use of strategies are relatively similar among male and female students.

Result of students' vocabulary size test

The result (in appendix) showed that the highest score was 83, the lowest score was 43, and the average score was 70.73. The table below shows the result of vocabulary size test. The researcher categorized the scores of vocabulary size test into three categories: high (76-100),

moderate (60-75), and low (40-59). The chart below displays the result of the students' vocabulary size test.

Table 2. The Result of Students' Vocabulary Size Test

High	76-100	37 respondents	37%
Moderate	60-75	50 respondents	50%
Low	40-59	13 respondents	13%

In accordance the analysis, it was revealed that 37 of the students have reached the required size of vocabulary. In order to read English text books easily the student should master at least 3000 words (Nation, 1990). It was proved by 37% of the student achieved score in high category (76-100). Yet, based on table 6, it showed that the 50 % first grade students at SMAN 1 Natar were had average size of vocabulary and 13% students had minimum vocabulary size.

Correlation between students' vocabulary learning strategies and their vocabulary size

To know whether there is correlation between students' vocabulary learning strategies and their vocabulary size of the first grade of SMAN 1 Natar, both variables were analyzed by using Pearson Product Moment Correlation on SPSS version 16.0.

Table 3.The Correlation between Vocabulary Learning Strategies and Students' Vocabulary Size.

Correlations		Vocabulary Learning Strategy	Vocabulary Size
Vocabulary Learning Strategy	Pearson Correlation	1	.351[**]
	Sig. (2-tailed)		.000
	N	100	100
Vocabulary Size	Pearson Correlation	.351[**]	1
	Sig. (2-tailed)	.000	
	N	100	100

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

From the result of calculation, it was found that the coefficient correlation between students' vocabulary learning strategies and their vocabulary size was 0.351 at the significant level of 0.01, which meant that there was a correlation between students' vocabulary learning strategies and their vocabulary size.

Result of correlation between students' vocabulary learning strategies preferences and vocabulary size based on gender

After getting the result of the correlation between students' VLS and vocabulary size in general, the researcher would compared the total score of students' VLS questionnaire and students' vocabulary size based on gender preference. In this case, the researcher compared the significant correlation between male and female students' vocabulary learning strategies and their vocabulary size.

Table 4. The Correlation between Male Students' Vocabulary Learning Strategies and Their English Vocabulary Size

Correlations

		Vocabulary Learning Strategies	Vocabulary Size
Vocabulary Learning Strategies	Pearson Correlation	1	.490[**]
	Sig. (2-tailed)		.000
	N	50	50
Vocabulary Size	Pearson Correlation	.490[**]	1
	Sig. (2-tailed)	.000	
	N	50	50

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

The result shows that the coefficient correlation was 0.490 which meant that there was a significant correlation between male students' vocabulary learning strategies and their vocabulary size.

Table 5. The Correlation between Female Students' Vocabulary Learning Strategies and Their English Vocabulary Size

Correlations

		Vocabulary Learning Strategies	Vocabulary Size
Vocabulary	Learning Pearson Correlation	1	.152

Strategies	Sig. (2-tailed)		.292
	N	50	50
Vocabulary Size	Pearson Correlation	.152	1
	Sig. (2-tailed)	.292	
	N	50	50

In the table 5, the r value shows that there was no significant correlation between female students' vocabulary learning strategies and their vocabulary size.

DISCUSSION

Comparative analysis of male and female students' VLS preference

Considering the result of the Independent Sample T-Test analysis, it was revealed that there was a significant difference in the use of cognitive strategy between male and female students since the probability was less than 0.05. Meanwhile, the value of p for determination strategy, social strategy, and memory strategy and metacognitive was higher than 0.05, meaning that there was no significant difference in VLS preference between male and female students.

According to Levene's Test for Equality of Variances, the Sig. of the overall strategies was 0.672, which is bigger than 0.05. Therefore, it can be assumed that variances were equal. Then, it is possible to test the hypothesis by using Equal Variances Assumed row of the t-test. From the appendix 7, it can be seen that Sig. (2-tailed) value of the overall strategies was 0.049 which is lower than 0.05, meaning that, the probabilities are < 0.05, thus, H1 is accepted, and Ho is rejected. In other word, there is a significant difference on vocabulary learning strategies preference between male and female of the first grade students at SMAN 1 Natar.

The present study revealed several findings. First, gender has a significant influence on the use of a learning strategy. Second, female students use different strategies than male students. Third, female students use more strategies than male students. Those finding was consistent with the previous study by Oxford (1990), found that gender has a significant influence on language learning strategies use, female students use different strategies than male students, and female students use more strategies than males. The last, this research also found that there was a significant difference in vocabulary learning strategies between male and female students. The result was in line with the study that was conducted by Božinović and Sindik (2011) and Viriya and Sapsirin (2014). The previous research was found that there was a gender difference in the use of learning strategies. The finding was also found that female students use all strategy types more frequently than male students.

Significantly, it was ascertained that female students had better frequency of strategy use in vocabulary learning as they had higher mean rank in almost all the categories of strategy use. The result of the present study seemed to show that the females organized their vocabulary learning better than the males as they had higher frequency of use in all of the strategies. It also showed that female students put more effort into increasing their vocabulary achievement compared to male students.

This finding correlates with the finding by Zhang (2009), the results showed that use of vocabulary learning strategies significantly correlates with gender and they were found that the females were generally more skillful than males at using learning strategies. The researcher summarized that the female learners are better strategy users than males, especially on cognitive strategies.

Vocabulary size test

The students' mean score was 70,73 which considered as a good score. The lowest score was 43 and the highest score was 83. It indicated that students in the first grade of SMAN 1 Natar has enough vocabulary size since the test was designed by Notion (1997) which is globally believed as a general principle that 3,000 word level is enough for productive use in speaking and writing.

The vocabulary size score was assumed to highlight the students' vocabulary proficiency. The result revealed that the students performed well in doing vocabulary test at the 2,000 – 3,000 level. This indicated a better result compared with the previous study by Nurweni and Read (1999), who found that average first year Indonesian university student only mastered about 1226 words.

Referring to Zimmerman (2005), the scores on the vocabulary size test can be used to provide a rough estimate of the vocabulary size. For example, if a participant can answer correctly 9 items out of 18 items in 1,000 level, it can be assumed that the student knows roughly 500 out of the 1000 words families from that level. Thus, in the present study, on average the students obtained the score 70,73. It can be calculated that the student knows approximately 2.121 words. When the language learners were comprehend 2000 word families, it indicates that the learners almost have 80% text coverage.

Correlation between students' vocabulary learning strategies and their vocabulary size

Since the correlation between students' vocabulary learning strategy and their vocabulary size was proved correlated, building a vocabulary store would help learners use a wide range of VLS like guessing from context, using monolingual dictionaries, and using media that require a certain knowledge of vocabulary (about 3000 words) efficiently. Such strategies, in turn, will enhance incidental learning and contribute to developing learners' vocabulary size.

Ahmed (1989) stated that the more experienced learners use more strategies. The high frequency of use of Vocabulary Learning Strategies of different level learners might have several reasons, for example, they might have a good knowledge of vocabulary. The high proficiency group reported employing VLSs more frequently than the moderate and low groups.

The result of the current study could also assist language teachers to improve their teaching methods. The teacher who are interested in their students' performance in learn the English vocabulary can introduced the vocabulary learning strategies and techniques to their students by designing useful task and giving relevant assignments.

Future studies on students' vocabulary learning strategies and its relation to students' vocabulary size can be carried out from several view-points. Studies on the individuals' differences of vocabulary learning strategies and their vocabulary size can be conducted both in qualitative and quantitative approaches. In addition, studying the effect of culture, home environment, peer groups, effective reaching methods and classroom atmosphere on vocabulary learning strategies could be very helpful to get better understanding of the relevant strategies.

The correlation between students' vocabulary learning strategies preferences and vocabulary size based on gender

The researcher has analyzed the significant correlation between students' vocabulary learning strategies and students' English vocabulary size based on gender preferences. The result showed that male students' vocabulary learning strategy preference was correlated to their vocabulary size. On the other hand, there was no significant correlation between female students' vocabulary learning strategy preference and their vocabulary size. Even though female students' were dominating the five vocabulary learning strategies, but vocabulary learning strategies might not be the dominant factor in increasing students' vocabulary size, but it could be influenced by another factor such as students' motivation and students' background knowledge.

IV. CONCLUSIONS AND SUGGESTIONS

Based on the data analysis, finally, the research about a comparative study between male and female students' vocabulary learning strategies preference related to their vocabulary size at SMAN 1 Natar comes to the conclusion as follows:
1. This study provides evidence that gender has significant influence in learning strategy. This is in line with Oxford's (1990) claim that gender becomes one of the factors that make students have different learning strategy.
2. This study confirmed several findings which found that vocabulary learning strategy have significant correlation with students' vocabulary size.

Other than that, the researcher also can conclude that female students use learning strategies more often than male students. The male students use determination strategy more frequently than other strategies, this proves that male students mostly use monolingual or bilingual dictionaries as vocabulary learning media. Meanwhile, female students use cognitive strategy more frequently than other strategies, which means that they make notes about the new vocabulary and learn it repeatedly.

In conclusion, both male and female students have realized that learning strategy has an important factor in mastering language skills and aspects. This is reinforced by the fairly high correlation level, which is 0.794 with a significant level of 0.01 (2-tailed). This research also proved that between male and female students' vocabulary learning strategies showed differences correlation toward their vocabulary size. The researcher assumed that there was another factor in students' vocabulary size, such as students' motivation and students' background knowledge.

Suggestion

Referring to the conclusion above, some suggestion could be listed as follows:

1. For the teacher

Since gender, in this study has significant factor in determining students' success in learning vocabulary and the strategy have significant correlation, thus, the teachers should emphasize this element toward vocabulary learning strategies use in the classroom. The students could understand what specific vocabulary learning strategy they might use in order to improve their own vocabulary size. Cohen (2002) suggest that strategy training should be integrated into the language curriculum under the guidance if the teacher and should be implemented into the language lesson in forms of various activities and tasks where a wide range of strategies are practiced.

2. For further researcher

This research was limited by the sample size. Thus, the result should not be generalized into all contexts of the situation since the result was probably compatible in a certain fields but not in the others. Therefore, further researcher on vocabulary learning strategy should try to investigate with random subject and bigger sample size in order to get more reliable on the result of the research. It is also possible for further research to investigate with randomize subject, bigger sample size in longer- time period, add more variables, moreover it is also suggested for the further research to use more than one instruments such as qualitative observation and interview in order to gain the data of the frequency of using vocabulary learning strategies and contribute the more reliable research.

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