

THE CORRELATION BETWEEN STUDENTS' VOCABULARY LEARNING STRATEGIES AND THEIR VOCABULARY SIZE

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ABSTRACT

The research aimed to finding out the types of vocabulary learning strategies (VLS) used by students of SMK Negeri 4 Makassar, the differences of vocabulary learning strategies used by the students of SMK Negeri 4 Makassar based on their field of study, and whether or not the significant relationship between vocabulary learning strategies and vocabulary size of the students of SMK Negeri 4 Makassar. The research applied correlational research design. Three classes different from three majors; accounting, administration, and tourism, were chosen as the subjects of this research obtained through random sampling technique from the population that consisted of 156 students in the academic year 2016/2017. There were 82 samples in this research. The result of this research was accounting students used metacognitive strategies frequently ($m=3.39$), administration students tended to use determination strategies ($m=3.32$), and tourism students applied social strategies frequent ($m=3.37$), and (3) there was a significant correlation between students' VLS and vocabulary knowledge based on result where $r = .225$ categorized as low degree of correlation and $p = .042$ where $p < \alpha$ ($\alpha = .05$), it means H_0 was rejected. Therefore, the result indicated that VLS used of students of SMK Negeri 4 Makassar had correlation with their vocabulary knowledge. The students used vocabulary learning strategies respectively from the most frequent to the least frequent; they are metacognitive strategies, determination strategies, social strategies, memory strategies, and cognitive strategies.

Keywords: Vocabulary Size, Flashcard media, Vocabulary Level Test

INTRODUCTION

Mastering English, students should pay attention to many aspects of language in order to achieve a high degree of competence in English. One of those aspects is vocabulary. Vocabulary as an importance language component supports of all other skills, namely writing, reading, speaking, and listening. In producing an effective communication both in spoken and written, somebody has to master adequate vocabulary. In fact, various researches showed that vocabulary is the weakness of the skills. Students cannot apply those skills properly because of the lack of their vocabulary size. Sudjamar (2013) found students encountered some difficulties in

speaking English, such as lack of confidence and lack of linguistic supports including vocabulary and pronunciation. Wilson (2015) in his writing research also stated that although the students have mastered the basic grammar, they are still difficult to convey their ideas without mastering an adequate size of words and the meanings.

To communicate in English efficiently and comprehensively, learners need to have sufficient vocabulary size. Vocabulary size refers to the number of words that a learner has in mental lexicon (Kalajahi & Pourshahian, 2012). Experts proposed different size for successful text comprehension; Nation (1990) stated that learners should master about 2,000 to 3,000. In addition, Kalajahi and Pourshahian (2012) also proposed 2,000 words for effective basic language. But if one wants to learn English better, 5,000 words are needed (Schmitt, 2000). Allen (1983) reported vocabulary size for Japanese high school students is 5,000 words.

There are many ways to acquire vocabulary. Based on the researcher's experience during teaching English in secondary school, it was found that students had their own way to deal with a new word, namely: taking a note, looking up in dictionary and using picture. In the context of learning English as foreign language the way they learn new vocabulary is called as vocabulary learning strategies (vls). This vocabulary learning strategy helps them to learn vocabulary. For example, some students learn and memorize a new word once that has been indirectly taught. While other learners may look up the meaning of new words in a bilingual dictionary. According to Schmitt's taxonomy (1997) in vocabulary learning consists of two kinds of vocabulary learning strategies namely discovery strategies (determination strategy and social strategy) and consolidation strategies (memory, cognitive, and meta-cognitive strategy).

Unfortunately, some students were not aware about their vocabulary learning strategy. In addition, there were students who do not know about vocabulary learning strategy even though they were using it unconsciously. This present study focused on the third-year students of SMK Negeri 4 Makassar who were divided into three majors field of study. Those are accounting, office administration, and tourism service. These students were selected as participants in this study because vocational school students were varying in educational background which are potential resources in providing various data.

Based on the previous explanation, the objectives of this research were; to find out the types of vocabulary learning strategies that students of SMK Negeri 4 Makassar use in learning, to find out the differences of vocabulary learning strategies used by the students of SMK Negeri 4 Makassar based on field of study, and to find out whether or not there is significant relationship between vocabulary learning strategies and vocabulary size of the students of SMK Negeri 4 Makassar.

REVIEW OF LITERATURE

Vocabulary

Mastering vocabulary is important in learning language especially English, because the potential knowledge that can be known about a word is rich and complex (Schmitt, 2000). While Vossoughi and Zargar (2009) said that without vocabulary mastery to express a wider range of meanings, communication, cannot happen in any meaningful way. It is clear that vocabulary is very important as the main element in communication. The lack of vocabulary results in the difficulties in all four language skills. To be successful in developing their language skills, language learners need to know sufficient vocabulary.

It is important to know how much vocabulary students need to draw on for listening, speaking, reading, and writing (Nation 1990, p. 75) so that language teachers may look into ways to help their students enlarge their vocabulary. However, how many words a foreign language learner must know in order to understand authentic situations or authentic texts is still questioned. This is a factor of concern what language skill, what level of a language learners' education, what vocabulary learning goals, or any communication situations a language learner deals with. Schmitt (2000) indicates that words around 2,000 would be a realistic goal that language learners need for daily basic conversations but this will not cover every conversational topic. Nation and Waring (1997) propose around 2,000-3,000 words families for productive speaking and writing. This is consistent with Allen (1983) who recommends that about 3,000 words would be necessary 'productive' items to be used in writing and speech. Laufer (1998) puts it about 3,000 words families, while Nation and Waring (1997) recommend that 3,000-5,000 words families is needed to provide a basis for comprehension, or to begin reading authentic texts. Hazenberg and Hulstijn (1996) mention about 10,000 for challenging academic texts as in university textbooks, and 15,000 to 20,000 (Nation and Waring 1997) to equal an educated native speaker of English.

Vocabulary Learning Strategies

Vocabulary learning strategies are a part of language learning strategies which in turn are a part of general learning strategies (Nation, 2001). Among language learning strategies, vocabulary learning strategies is one of the most important areas of investigation because of the great importance of vocabulary.

In classifying learning strategies, experts have different ways of classifying language learning strategies. Schmitt in Mayuree (2017) has developed a taxonomy of vocabulary learning strategies based on an extensive language learning strategies' taxonomy organized by Oxford's including memory, cognitive, compensation, metacognitive, affective, and social strategies.

METHODS

Research Design

The researcher applied correlational research design. According to Gay et al. (2006) correlation research involves collecting data to determine whether, and to what degree, a relationship exists between two or more quantifiable variables. It provides a numerical estimate of how related two or more variables (Cresswell, 2003). This research intended to investigate the correlation between students' vocabulary learning strategies and their vocabulary mastery.

Population and Sample

The population of the research was the students of third grade of SMK Negeri 4 Makassar in academic year 2019-2020. They were in three different majors. Those were accounting, office administration, and tourism service. The number of population was 156 students. The method used in this research was simple random sampling. The participants were chosen based on their class, this study chose all class A of the third grade to be the participants. There were 82 participants.

Research Instrument

Questionnaire

To gather information about students' vocabulary learning strategies, the researcher divided questionnaire into two parts. The first part of the questionnaire was respondents' background information which was intended to collect data on demographical variables such as field of study of respondents while the second part was intended to collect data on VLS use of the participants. The questionnaire was adopted from Mayuree (2017) and it adapted by translating to bahasa Indonesia in order that the students could easily understand and give respond to the questionnaire.

Vocabulary Level Test

The Vocabulary test consisted of 70 items of multiple choices which was divided into two parts, namely vocabulary size test and vocabulary depth understanding. Nation's vocabulary size test was adopted as the instrument for measuring the participants' vocabulary size. It was a multiple-choice format consisting of 50 items with 10 items from each of five 1000 words levels. The participants were invited to choose one right answer that had similar meaning to the target word.

FINDINGS AND DISCUSSION

Findings

Vocabulary Learning Strategies Used

The data of VLS refers to frequently of the students use learning strategies in learning, particularly vocabulary learning. The mean, standard deviation (SD), degree and rank of VLS in general are presented as followed:

Table 1. The Mean, SD, Degree, Rank of VLS

| Strategies | Mean | SD | Degree | Rank |
|---------------|------|-----|--------|------|
| Determination | 3.35 | .57 | Medium | 2 |
| Social | 3.08 | .66 | Medium | 3 |
| Memory | 2.96 | .56 | Medium | 4 |
| Cognitive | 2.84 | .64 | Medium | 5 |
| Metacognitive | 3.48 | .63 | Medium | 1 |
| Total Score | 3.14 | | Medium | |

As shown in table 1, the result of the descriptive statistics analysis for the total score which respected to overall strategy use (M=3.14) revealed that the third-year students of SMK Negeri 4 Makassar were medium learning strategy users. In other words, the students employed strategies in the process of learning vocabulary with medium frequency. Therefore, the students reported medium use of each strategy category with the mean score spread from the highest rank (M =3.48) to the lowest rank (M=2.84)

Then, the highest frequently strategy used by the students was metacognitive strategies with M = 3.48. Then, it was followed by determination, social and memory strategies, while cognitive strategies ranked the lowest mean score (M = 2.84). Therefore, specifically it found that all of the students indicated a preference for more metacognitive and determination strategy users.

Referring to the result, the conclusion that can be drawn is the frequently strategy used by the third-year students at SMK are metacognitive and determination strategies. Meanwhile, metacognitive strategies deal with helping students to center their learning, to arrange and plan their learning, and to evaluate their learning. The students could be categorized as independent learner.

The Variations in Students’ VLS Use According to Field of Study

The table 2 below indicates the frequently used VLS based on field of study of students SMK Negeri 4 Makassar.

Table. 2 Variations in Students’ Strategy Use in Five Categories According to Fields of Study

| VLS Category | Fields of Study | | | | | |
|----------------------|-----------------|-----|----------------|-----|---------|-----|
| | Accounting | | Administration | | Tourism | |
| | Mean | S.D | Mean | S.D | Mean | S.D |
| Determination | 3.37 | .48 | 3.32 | .43 | 3.24 | .56 |
| Social | 3.22 | .39 | 3.20 | .39 | 3.37 | .39 |
| Memory | 3.24 | .41 | 3.25 | .42 | 3.04 | .57 |
| Cognitive | 3.28 | .41 | 3.27 | .44 | 3.10 | .57 |
| Metacognitive | 3.39 | .38 | 3.24 | .55 | 3.15 | .59 |

As shown in table 2, accounting students used metacognitive strategies most frequently (M = 3.39), followed by determination, cognitive, memory and social strategies. Students of administration department used determination strategies frequently (M = 3.32), followed by cognitive, memory, metacognitive and social. Students of tourism department used social strategies most frequently (M = 3.37) and the least frequently used is memory.

The students' Vocabulary Size

The students' vocabulary test score is presented in table 3.

Table 3. The Frequency and Percentage of Students' Vocabulary Test Score

| Classification | Score | Freq (F) | Percentage (%) |
|----------------|----------|----------|----------------|
| Excellent | 91 – 100 | 3 | 3.66 |
| Very Good | 76 – 90 | 29 | 35.37 |
| Good | 61 – 75 | 29 | 35.37 |
| Average | 51 – 60 | 14 | 17.07 |
| Poor | 26 – 50 | 7 | 8.54 |
| Very Poor | 0 – 25 | 0 | 0 |
| Total | | 82 | 100 |

Those classifications are converted into three major categories; high (excellent, very good and good), medium (average), and low (poor and very poor). The data of students' frequency and percentage score of students' vocabulary test score based on the test result in table 3 revealed that most of students (61 students) were categorized in high-achieving category. It was revealed by the range interval score spread in good to excellent category which included 29 students got good classification, 29 students who got very good classification, and 3 students who got excellent classification. Meanwhile, 14 students were in medium category, and there were 7 students in low category which revealed by the range interval score spread in poor and very poor classification. Besides, the result of the mean score of the students' vocabulary test score at SMK Negeri 4 Makassar showed as follow.

Table 4. The Mean Score and Standard Deviation of Students' Vocabulary Test Score

| Vocabulary Test Score | Mean Score | Std. Deviation |
|-----------------------|------------|----------------|
| | 69.77 | 12.49 |

As shown above, the mean score of the students' vocabulary test score was 69.77 and the standard deviation was 12.49 which categorized in good category. In other words, the vocabulary test score of students of SMK Negeri 4 Makassar based on the result of the test was classified in high or good achievement category. In fact, this result indicated that the students were categorized as high achievement vocabulary on the result.

The Correlation Between Students' Vocabulary Learning Strategy and Their Vocabulary Size.

This subsection deals with the analysis of correlation between students' vocabulary learning strategies used and their vocabulary size of the third-year students of SMK Negeri 4 Makassar. In this section, the correlation coefficient is represented by "r" ranges from less than +/- .35 which means a low significant correlation, between +/- .35 and +/- .65 means a medium or moderate significant correlation, and above +/- .65 means a high significant correlation (Gay, et al. 2006). In addition, the researcher compared the calculation of Sig. or p with $\alpha = .05$ in order to conclude the hypothesis testing. If the calculation is smaller than alpha $\alpha = .05$, it means that H_0 is rejected and H_1

is accepted. Meanwhile, if the calculation is bigger than alpha $\alpha = .05$, it means that H_0 is accepted and H_1 is rejected.

Table 5. Correlation of Overall VLS and Vocabulary Size

| | | Vocabulary Learning Strategies | Vocabulary Size |
|---------------------------------------|---------------------|--------------------------------|-----------------|
| Vocabulary Learning Strategies | Pearson Correlation | 1 | .225* |
| | Sig. (2-tailed) | | .042 |
| | N | 82 | 82 |
| Vocabulary Size | Pearson Correlation | .225* | 1 |
| | Sig. (2-tailed) | .042 | |
| | N | 82 | 82 |

*. Correlation is significant at the 0.05 level

Based on result of Pearson correlation between students' vocabulary learning strategies and their vocabulary size in table 4.10, this current research displayed Pearson correlation (r) = .225. It implied that the degree of correlation was low and the sig. (2-tailed) was .042 which smaller than $\alpha = .05$. Then, the result of hypothesis testing of this research showed that the null hypothesis (H_0) was rejected and alternative hypothesis was accepted. It means that there was significant correlation between students' vocabulary learning strategies and their vocabulary size, although the correlation is low.

Table 6. Correlation Between Five Strategies and Vocabulary Size

| | Correlations | |
|---------------|---------------------|-----------------|
| | | Vocabulary size |
| Memory | Pearson Correlation | -.132 |
| | Sig. (2-tailed) | .237 |
| | N | 82 |
| Cognitive | Pearson Correlation | .178 |
| | Sig. (2-tailed) | .109 |
| | N | 82 |
| Metacognitive | Pearson Correlation | .325 |
| | Sig. (2-tailed) | .003 |
| | N | 82 |
| Determination | Pearson Correlation | .262 |
| | Sig. (2-tailed) | .017 |
| | N | 82 |
| Social | Pearson Correlation | .135 |
| | Sig. (2-tailed) | .225 |
| | N | 82 |

Table 6. showed the correlation coefficient between 5 strategies of vocabulary learning strategies and the students' vocabulary size of SMK Negeri 4 Makassar. First strategy was memory strategies, from result of data analysis, it showed that $r = -.132$, where this score lower than .35, or $p = .237$ was greater than $\alpha = 0.05$ ($p > \alpha$). Therefore, the result indicated that memory strategies had no correlation with vocabulary size of participants.

The second strategy was cognitive strategies, from result of data analysis it showed that $r = .17$, where this score lower than $.35$, or $p = .109$ was bigger than $\alpha = 0.05$ ($p > \alpha$). Therefore, the result showed that cognitive strategies had no correlation with vocabulary size of participants. Then, the next strategy was metacognitive strategies, from result of data analysis it showed that $r = .325$ where this score lower than $.35$, or $p = .003$ was smaller than $\alpha = 0.05$ ($p < \alpha$). Therefore, the result indicated that metacognitive strategy had correlation with vocabulary size of participants.

The fourth strategy was determination strategies, from result of data analysis it showed that $r = .262$, where this score lower than $.35$, or $p = .017$ was smaller than $\alpha = 0.05$ ($p < \alpha$). Therefore, the result indicated that determination strategy had correlation with vocabulary size of participants. Then, the last strategy was social strategies, from result of data analysis it showed that $r = -.135$, where this score lower than $.35$, or $p = .225$ was greater than $\alpha = 0.05$ ($p > \alpha$). Therefore, the result revealed that social strategies had no correlation with vocabulary size of participants.

Discussion

From the previous explanation in findings, the researcher wishes that both problem statements in this research can clearly be answered. The first research question is about the use of the five strategies of VLS by students of SMK Negeri 4 Makassar. It has been verified by the data provided in this chapter that the vocabulary learning strategies used by the students, as measured by VLS questionnaire, ranges from 2,84 to 3,48 which means that the use is generally in medium or moderate category. The use of vocabulary learning strategies respectively from the most frequent to the least frequent are 1) Metacognitive strategies, 2) Determination strategies, 3) Social strategies, 4) Memory strategies, and 5) Cognitive strategies.

The second questions, according to table 2, five vocabulary learning strategy groups employed by the students of three field of study are shown as means and standard deviation. Considering the strategies used by accounting students, the metacognitive is the most frequently used, followed by determination, cognitive, and memory strategies respectively whereas social strategies are the least used by them. This result corresponded with Shamis (2003) who confirmed that metacognitive strategies are considered to be often used strategies by many language learners. Likewise, social strategies also are the least frequently used by administration students, the most frequently is determination, followed by cognitive, memory, and metacognitive. On the contrary, tourism students used social strategies most frequently, followed by determination, metacognitive, cognitive, and memory strategies. It is supported by Astika (2016) in her research which found that students discover new vocabulary by interaction with others. From the findings of this study, it can be said that vocabulary learning strategies employed by the students of SMK Negeri 4 Makassar based on three fields of study are different because of several characteristics of their majors. The students

majored in tourism used social strategies most frequent whereas it was contradictive with accounting and administration majors that used them least frequent.

Furthermore, this current research displayed Pearson correlation ($r = .225$). It implied that the degree of correlation was low and the sig. (2-tailed) was $.042$ which smaller than $\alpha = .05$. Then, the result of hypothesis testing of this research showed that the null hypothesis (H_0) was rejected and alternative hypothesis was accepted. It means that there was significant correlation between students' vocabulary learning strategies and their vocabulary size, although the correlation is low. This current research had similar result with others which were found by Furqon (2013). This research found that there is a positive correlation between VLS and vocabulary level. Therefore, it can be considered that the students' English proficiency level was influenced by other factors that might come from students' factors such as VLS applied by the students whether inside or outside of classroom regarding to result of proficiency test. Specifically, based on the result of these five strategies, it revealed that there were two strategies had correlation with vocabulary size, those are metacognitive and determination strategies. As shown before, both of these strategies also the most frequently used strategies by the participants. It can be concluded, the more frequent a strategy is used in learning the better result achieved.

CONCLUSION

The results of this research revealed that the students at SMK Negeri 4 Makassar were generally medium category users of vocabulary learning strategies, where the use of vocabulary learning strategies respectively from the most frequent to the least frequent are metacognitive strategies, determination strategies, social strategies, memory strategies, and cognitive strategies. Then, the use of vocabulary learning strategies based on the field study of students SMK Negeri 4 Makassar showed the accounting students used metacognitive strategies frequently ($m=3.39$), administration students tended to use determination strategies ($m=3.32$), and tourism students applied social strategies frequent ($m=3.37$), Finally, the result of this research showed there was a significant correlation between students' VLS and vocabulary size based on result where $r = .225$ categorized as low degree of correlation and $p = .042$ where $p < \alpha$ ($\alpha = .05$), it means H_0 was rejected. Therefore, the result indicated that VLS used of students of SMK Negeri 4 Makassar had correlation with their vocabulary size.

Additionally, since the research mentioned the answer relating to field of study, vocabulary learning strategies and vocabulary size. However, the further research is needed to provide the better understood of their interconnection and conduct the test which will find their accuracy and to conduct more comprehensive investigation on a wide range of the factors and variables affecting VLS used by the EFL students, especially Indonesian students.

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