

VOCABULARY LEARNING STRATEGY EMPLOYED BY INDONEISAN ENGLISH AS A FOREIGN LANGUAGE (EFL) LEARNERS IN MALAYSIA

Ridwan¹

¹Pusat Pengajian Pendidikan, FKI, Universiti Sultan Zainal Abidin, Malaysia

ABSTRAK

Penelitian ini membahas strategi pembelajaran kosakata (VLS) yang digunakan oleh pembelajar Bahasa Inggris Indonesia sebagai Bahasa Asing (EFL) dalam isu lingkungan Malaysia. Penelitian ini dilakukan untuk menguji strategi pembelajaran kosakata yang paling sering digunakan oleh pelajar EFL Indonesia dan untuk mengetahui apakah siswa dengan tingkat pendidikan dan jurusan akademik berbeda secara signifikan dalam menggunakan strategi pembelajaran kosakata di universitas negeri di Malaysia. 202 mahasiswa yang terdaftar di berbagai gelar dan jurusan akademik dipilih secara acak dalam penelitian ini pada semester kedua tahun ajaran 2022-2023. Kuesioner berdasarkan taksonomi Schmitt (1997) diadopsi dan didistribusikan melalui Google Formulir. Selain itu, prosedur analisis data menggunakan analisis statistik dengan statistik deskriptif dan uji One-way ANOVA untuk membandingkan perbedaan individu dalam penggunaan VLS. Temuan penelitian ini menunjukkan bahwa VLS yang paling sering digunakan siswa adalah kategori determinasi dan yang paling jarang digunakan siswa adalah kategori Sosial. Hasilnya juga menunjukkan tidak ada perbedaan yang signifikan secara statistik dalam penggunaan VLS berdasarkan tingkat pendidikan dan jurusan akademik.

Kata Kunci: Jurusan Akademik; Tingkat Pendidikan; Pembelajar EFL; Strategi Pembelajaran Kosakata.

ABSTRACT

The study discusses Vocabulary Learning Strategies (VLS) employed by Indonesian English as a Foreign Language (EFL) learners in the context of environmental issues in Malaysia. The research aims to examine the most frequently used vocabulary learning strategies by Indonesian EFL students and determine whether students with different levels of education and academic majors significantly differ in the use of vocabulary learning strategies at state universities in Malaysia. A total of 202 students enrolled in various degree programs and academic majors were randomly selected for this study during the second semester of the academic year 2022-2023. A questionnaire based on Schmitt's taxonomy (1997) was adopted and distributed through Google Forms. Additionally, data analysis procedures employed statistical analysis with descriptive statistics and One-way ANOVA to compare individual differences in the use of VLS. The findings of this research indicate that the most frequently used VLS by students are in the determinacy category, while the least used are in the Social category. The results also demonstrate no statistically significant differences in the use of VLS based on the level of education and academic majors.

Keywords: Academic Majors; Education Levels; EFL Learners; Vocabulary Learning Strategies.

1. INTRODUCTION

English is essential to acquire because of its role as a global language and lingua franca. It has been concerned to be the first lingua franca in the world (Jenkins, 2009). Language has become part of every existing field in the modern world. Most native and non-native speakers of English (second and foreign language) use English as their communication tool in their business matters or business organisations (Rao, 2019). Thus, it has become the fastest-increasing language in this modern world and

occupies the status of a commercial language by connecting nations worldwide. Proficiency in English opens more professional and personal opportunities for success in life (Nishanthi, 2018). It can be seen that English is an inevitable requirement in several fields, such as scientific research, engineering and technology, education, medicine, communication, and several other fields.

In learning a second or foreign language, vocabulary is considered one of the most critical elements in comprehending lesson materials, either spoken or written. Vocabulary has long been interpreted to be the wordlist. Without sufficient vocabulary, therefore, it is almost impossible to understand not only a second or foreign language, even a mother tongue, such as in listening, speaking, reading, and writing contexts. So, the vocabulary in English language learning is fundamental, and how much vocabulary one needs is an enormously important area of research and discussion (Adolphs & Schmitt, 2003). In addition, numerous scholars have studied how much vocabulary is needed for speaking, reading, and writing (Cobb, 2007; Nation, 2006; Van Zeeland & Schmitt, 2013). As a result, a language learner will not be able to speak, read, write, or understand a foreign language without having the vocabulary, and it is at least the prior knowledge of the words required in the communication. Furthermore, Bogaards & Laufer (2004) state that vocabulary is one of the elements necessary for language mastery in language learning by learners.

A language, moreover, has components which become its based role system, such as grammar, pronunciation and vocabulary. Most learners, based on research, reported that in terms of the critical component of learning language, they referred to vocabulary more than other components (Al-Nujaidi, 2003). In addition, Hassan & Abubakar (2015) state that “vocabulary is considered a significant part of a language, especially in learning a foreign language because the more vocabulary one knows, the more capacities s/he has for uttering the phrases, clauses and sentences”. It means that vocabulary can be considered as all parts of speech. The words ‘*nation*, *national*, and, *nationality*, for instance, are different part of speech as well as different vocabulary. Not only single words, but also collocation, phrases or idiom are considered as vocabulary as well as in ‘*take off*, *catch up*, and *put off*’. On the other words, according to Alqahtani (2015), vocabulary is defined as the total number of words that are needed to communicate idea and express the speakers’ meaning. Furthermore, researchers such as Laufer & Nation (1999), Gu (2010, 2019) and others have realized that the acquisition of vocabulary is essential for successful second language use and plays a vital role in the formation of complete spoken and written texts.

The role of gender, grades, learning environment, and age context on vocabulary learning strategies has also been investigated. However, similar to the previous variable, studies on the relationship between vocabulary learning strategies and gender found mixed and inconsistent results, such as in Bhatti & Mukhtar (2020) and Gorgoz & Tican (2020). Previous studies in the Indonesian context did not connect the VLSs to individual differences such as gender, education level, age, learning environment, and academic major. Therefore, the current research also focuses on aspects related to students’ individual differences and use of appropriate and effective VLSs to see their actual use of such strategies and to understand certain factors affecting their use of VLSs. Consequently, this study is interested in investigating VLSs among those specific students. They study and live abroad because much previous research works on VLSs have been carried out in several contexts of ESL/EFL at the same environment in which students live. Besides, few studies in terms of VLSs have been conducted within the Indonesian context (EFL), such as (Bakti, 2017; Besthia, 2018; Noprianto & Pumawarman, 2019). However, as for those students who study at some public universities in Malaysia. The investigation of this issue (VLSs) is considered as one of the unique contexts among those previous ones.

Therefore, it is worth investigating VLSs among those particular students to help the researcher fill the gap between previous studies conducted on both EFL/ESL contexts in which students’ study and live in the same environments. In addition, teachers encounter challenges, particularly in helping students acquire and utilise new words effectively. In such a process, VLSs may be used effectively. It is of great

help for students to learn such effective strategies to know how to find the meaning of new words, store them in their memory, and use them by practising and expanding their vocabulary. Consequently, this research intends to investigate English vocabulary learning strategies employed by Indonesian EFL university students at public universities in Malaysia. It also examined the relationship between VLSs use and individual differences in enhancing the learners' language proficiency.

The government of Indonesia has stressed the importance of the English language, especially among students in secondary schools and tertiary education institutions, unfortunately, the level of English proficiency has not improved much. This fact is evident in the results produced by Education First's English Proficiency Index (EF EPI), which show that in 2021, Indonesia is placed 80th out of 112 countries in terms of proficiency level, a drop from 74th position the year before and still in low proficiency level. It becomes a worrying scenario as English proficiency is fundamental in this era. One reason for the poor performance of English could be attributed to the lack of vocabulary among the students. Vocabulary knowledge is an essential element of the language. Thus without sufficient vocabulary, it is not easy to attain a high level of English. Novianti (2016) reported that receptive vocabulary scores of second-year undergraduate students in an Indonesian college are lower than 2000 words even after they had gained extra hours of English instruction. In addition, among high school students, poor vocabulary knowledge can be seen in Mustafa's (2019) study. His study showed that from 1st 2.000 most-frequently used words that dominated texts in junior high school and 1st 3.000 most-frequently used words in the senior high school texts, the estimated percentages acquired by students were lower than 60% in most, with only 72% for the 1st 1.000 level. It means that the vocabulary size of Indonesian secondary school graduates has not satisfied the curriculum expectation.

The lack of vocabulary knowledge could be attributed to using (im)proper vocabulary learning strategies. It has been widely discussed that strategic knowledge helps students gain more vocabulary (Alparslan & Mirioglu, 2020). However, as Novianti's (2016) study revealed, among Indonesian students, most second-year undergraduate students in an Indonesian college were prone to prefer passive/incidental strategies over more deliberate ones. They did not use strategies effectively, resulting in Indonesian students' lower vocabulary knowledge. Another problem is relating English to the daily life of Indonesian learners. Lack of opportunity for them to use English leads them not to have the experience of using English daily and in their future careers. The students use the Lingua Franca in Indonesia, "*Bahasa Indonesia*", mainly at school and sometimes at home (Susanto, 2018). Therefore, it is clear that social and cultural environments do not provide strong support for learning English. According to Dakun & Gieve (2008), language and learning environment can influence learning processes, such as vocabulary learning sources and strategy. use.

Past studies (i.e., Alahmadi et al., 2018; Benedict & Shabdin, 2021; Goundar, 2019; Gu & Johnson, 1996; Nur & Jusoh, 2022; Schmitt, 1997) have shown that there is a relationship between vocabulary learning strategies used and successful learners. However, most studies were conducted in ESL or EFL contexts (i.e., Asgari & Mustapha, 2011; Bakti, 2017; Besthia, 2018). While Nur & Jusoh (2022), as the previous research was conducted on VLS utilised by Indonesian students in Malaysia only focus on gender. Since then, limited studies inconsistent findings have been done on vocabulary knowledge concerning Indonesian EFL learners studying in a Malaysian setting (ESL). Thus, there is a need for a survey to be conducted to investigate the interplay of environments (both ESL and EFL) of vocabulary learning strategies and individual differences. Thus, it would be interesting to see if the students learn the language in an ESL context instead of EFL and whether their vocabulary learning strategies use different. Research on the relationship between VLSs on individual differences (gender, education level, academic major, etc.) In the current research, the present researcher investigated the vocabulary learning strategies used by Indonesian learners studying at several public universities in Malaysia based on education levels and academic majors.

Based on what has been highlighted above, this study tried to fill those gaps by investigating the use of vocabulary learning strategies related to individual differences by Indonesian EFL university students studying in Malaysia. Therefore, the present study tries to answer the following research questions:

1. What are the most frequently used vocabulary learning strategies among the students across three academic levels and academic majors?
2. Do the vocabulary learning strategies use significantly differ across Indonesian EFL university students in education levels?
3. Do the vocabulary learning strategies use significantly differ across Indonesian EFL university students in the different academic majors?

2. METHODOLOGY

This research is designed to explore the VLSs used most frequently by Indonesian EFL university students at public universities in Malaysia. Furthermore, the study investigates the relationship between vocabulary learning strategies use and individual differences. Therefore, a quantitative method with a survey is used in the current research. In addition, Creswell & Creswell (2018) stated that the researcher's choice for a particular research methodology is further influenced by the research problem or issue being studied, the personal experiences of the researchers, and the audience for whom the researcher writes.

The respondents whom the researcher examined are explained by Howitt & Cramer (2000) as “a subset of a population selected from the full set or the entirety of population following the research design” (p. 93). In any research study, selecting a particular and limited number of people from a large population under observation is necessary. Since this study is interested in investigating vocabulary learning strategies used by Indonesian students studying at Malaysian universities, thus, the respondents of this research were Indonesian university students studying at public universities in Malaysia. Such as Universiti Sultan Zainal Abidin (UniSZA), Universiti Malaysia Perlis (UniMAP), Universiti Teknologi Mara (UiTM), Universiti Pendidikan Sultan Idris (UPSI) especially education-level undergraduate and postgraduate. A total sample is 202 students from 420 students as a population. There are 98 of male (48.5 %) and 104 females (51.5%), ages from 17 to 66 years old, with education level, Degree (S1) 71 (35.15%), Masters (S2) 104 (51.5%) and Doctoral (S3) 27 (13.35%) students. In addition, the participants also registered in three academic majors, Applied Science (80), Social Science (55) and Formal Science (60) students from 22 provinces in Indonesia. By employing random sampling, the sample size selection was chosen based on Krejcie & Morgan's (1970) determining sample size table. Based on the sample size table the recommended sample of this study should be 202; therefore, the researcher selected a minimum of 202 students to participate.

The objective of the current research is to investigate the VLSs used by Indonesian EFL university students at universities in Malaysia. Thus, the survey questionnaire was distributed to 202 students in the second semester of the academic year 2022-2023. The questionnaires were distributed to Indonesian university students studying at several universities in Malaysia through Google Forms. In addition, every participant took one to seven days to answer and submit the questionnaire online. After collecting the online survey, the researcher prepared data for analysis by screening and coding these answers into numerical scores. This method of collecting and coding the data enabled the researcher to collect and gather reflective data about the EFL Indonesian university students in Malaysia regarding their utilisation of vocabulary learning strategies.

This research aims to investigate the use of vocabulary learning strategies and to compare whether the usage significantly differs in terms of individual differences (i.e. education levels, academic majors) among Indonesian university students in Malaysia. Data analysis has been defined by Migrant & Strart (2006) as “a set of procedures or methods that can be applied to data that has been collected to

obtain one or more sets of results”(p.190). On the other hand, it reflects a process for systematically engaging with the data to respond to the research questions. Flynn (2011) affirms that the statistical package for social science (SPSS) is a powerful application that performs simple descriptive statistics, reliability measurement, and advanced tests. Accordingly, in the statistical analysis of data collected in the present research, the researcher identifies the SPSS version 26. Descriptive statistics were utilised to analyse the collected data. For the descriptive statistics, means, frequency, and standard deviation were calculated. This descriptive presentation helped the researcher understand the respondents' characteristics and general views. For the statistical analysis, the means and standard deviation were calculated. An independent-sample t-test was used to compare the mean score on some continuous variables for two different groups of subjects (Field, 2009). This test was used in the present research to find out the difference in using vocabulary learning strategies in individual differences among Indonesian EFL university students. According to Creswell & Creswell (2018), descriptive statistics aim to draw data for all independent and dependent variables in the study. This descriptive presentation helps to understand the characteristics of the respondents and their views in general. For the statistical analysis, the means and standard deviation were calculated. An independent-sample t-test was used to compare the mean score on some continuous variables for two different groups of subjects (Field, 2009). This test is used in the present study to compare individual differences in utilising VLSs among Indonesian EFL university students. Overall, every section that presents the analysis of collected data for each question is shown in **figure 1** below.

Flow Diagram of Data Analysis
Step 1- Analysis of pilot study/ reliability and validity test of the questionnaire
Step 2- Using SPSS to analyse the questionnaire data to answer research questions
Step 3- Descriptive statistics to analyse the questionnaire data to answer research questions one
Step 4- Using ANOVA test to analyse the questionnaire data to answer research questions two and three

Figure 1. Flow diagram of data analysis procedure that was performed in this study

2.1 Time and Place

The researcher decided to investigate the vocabulary learning strategies utilized by Indonesian EFL university students studying in Malaysia, in the second semester of the academic year 2022-2023

3. RESULT AND DISCUSSION

The most frequently used vocabulary learning strategies among the students across three academic levels and academic majors

Having analyzed the questionnaire, the researcher examined the research results based on the research question. Whether there was a statistically significant difference VLSs employed by the participants based on individual differences (i.e. different education levels and academic majors). The vocabulary learning strategies employed in this present research are organised into five categories based on Schmitt's (1997) classification: *Determination Strategies* (DET), *Social Strategies* (SOC), *Memory Strategies* (MEM), *Cognitive Strategies* (COG), and *Meta-cognitive Strategies* (MET). Thus, the participants' responses were interpreted using descriptive statistics, including the mean scores, standard deviation and the sort rank VLSs used from the highest to the lowest. Descriptive statistics of VLS employed by Indonesian EFL university students in **Table 1** shows that *determination strategies* were the most preferred category among the five categories (Mean= 3.56, Std. Deviation= .637), followed by the *memory strategies* (Mean= 3.49, Std. Deviation= .649). It also points out that the *cognitive strategies* were the third highest, with the average mean score at 3.32 and .895 of the Std. Deviation. In addition, among the five categories of VLSs, *meta-cognitive strategies* (Mean= 3.14, Std. Deviation= .540, and *social strategies* (Mean= 2.91, Std. Deviation .904) was the least employed by the participants.

The findings of this study in line with the findings found by Benedict & Shabdin (2021) and Nur & Jusoh (2022) that *Determination category* was the most preferred by students to improve their vocabulary knowledge. On the other hand, the results are not consistent with the results done by Lam & Kuan (2019). They assessed Mandarin EFL learners at Sarawak University that indicated the learners employed cognitive strategies the most and metacognitive strategies the least. The most popular strategy included taking notes, studying the sound and stroke order of a word, asking classmates, and reviewing vocabulary regularly. While in this study shows that “*I used a bilingual dictionary (English/Indonesia)*” from *Determination* and “*I try to develop my vocabulary knowledge by watching English TV channels (e.g. movies, songs, and documentaries)*” from *Metacognitive* as the most frequently used by learners and “*I ask a lecturer for a translation of the new word into Indonesian*” from *Social* category as the least frequently used by learners.

Table 1. VLS used by Indonesian EFL university students in Malaysia

Category	Total	Mean	Std. Deviation	Rank
DET	202	3.56	.637	1
MEM	202	3.49	.649	2
COG	202	3.32	.895	3
MET	202	3.14	.540	4
SOC	202	2.91	.904	5

Vocabulary Learning Strategies Employed by Indonesian EFL University Students in Different Education Levels

Having analyzed the questionnaire, the researcher examined the research results based on the research question. Whether there was a statistically significant difference VLSs employed by the participants based on individual differences (i.e. different education levels and academic majors). To analyse the data from 202 respondents, the researcher used descriptive statistics and One-Way ANOVA. **Table 2** shows the analysis results in mean and standard deviation scores for VLS used by participants based on education levels. It demonstrates descriptive statistics related to the mean values for the three academic level. It can be seen that First Degree (Degree will be used on the next discussion) received the lowest mean score

with a mean value of 147.18 and a standard deviation of 24.679, followed by Master (M= 147.99. SD= 25.833) and Doctoral was found as the highest mean value score (M= 160.11, SD= 25.004).

Table 2. Descriptive statistics of VLS employed by participants based on education levels

VLS used by learners	Descriptive							
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimu m	Maximu m
					Lower Bound	Upper Bound		
Degree	71	147.18	24.679	2.929	141.34	153.02	95	220
Master	104	147.99	25.833	2.533	142.97	153.01	48	201
Doctoral	27	160.11	25.004	4.812	150.22	170.00	100	219
Total	202	149.33	25.556	1.798	145.78	152.87	48	220

Table 3 One-way ANOVA of VLS employed by participants based on education level

ANOVA					
VLS used by learners					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3652.159	2	1826.079	2.847	.060
Within Groups	127622.277	199	641.318		
Total	131274.436	201			

As indicated in **Table 3** above, it is clear that there was no statistically significant difference in the use of vocabulary learning strategies between the three groups $F(2, 199) = 2.847, p = .060$. Notwithstanding there was a different mean score for each group Degree (M= 147.18, SD= 24.679), Master (M= 147.99. SD= 25.833) and Doctoral (M= 160.11, SD= 25.004). based on the results, no statistically significant difference was found, thus, the null hypothesis is accepted, and the alternative hypothesis is rejected. These results are coherent with Gu (2002) findings' that there was no statistically difference in using vocabulary learning strategies in overall a group of adult Chinese EFL Learners on their vocabulary learning strategies. This study also concurs with Ghalebi et.al (2020) findings. They found that there was no significant difference between MA and Ph.D. students in their use of vocabulary learning strategies. However, the results of this study are not consistence with the findings of Sarani & Shirzaei (2016) which indicated that education level does a significant difference between undergraduate and postgraduate EFL learners' use of vocabulary learning strategies.

Vocabulary Learning Strategies Employed by Indonesian EFL University Students in Different Academic Majors

An Anova analysis is used in this study to answer the second research question, which aims to compare the students' use of VLSs based on different academic majors. According to Hawk et al. (2006), ANOVA compares two groups or more. Therefore, three various academic majors were chosen to be tested in the Anova Test. The findings of the Anova analysis are shown in **Tables 4.** and **5.**

Table 4. Descriptive VLS employed by participants based on academic major

VLS used by Participants	Descriptive							
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Min	Max
					Lower Bound	Upper Bound		
Applied Science	80	152.86	24.844	2.778	147.33	158.39	48	201
Social Science	55	148.56	21.799	2.939	142.67	154.46	99	201
Formal Science	67	145.15	28.422	3.472	138.22	152.08	80	220
Total	202	149.13	25.424	1.789	145.61	152.66	48	220

Table 4.12 demonstrates Descriptive statistics related to the mean values for the three academic majors. It can be seen that Applied Science received the highest mean score with a mean value of 57.44 and a standard deviation of 11.620, followed by Social Science (M=56.96, SD=12.508) and Formal Science (M=56.96, SD=13.867).

Table 5. One-Way Anova of VLS Employed by Participants Based on Academic Major

ANOVA					
VLS Used by Participants					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2193.869	2	1096.934	1.709	.184
Within Groups	127733.522	199	641.877		
Total	129927.391	201			

Table 5. reveals that there was no statistically significant difference in the perception between the three groups $F(2, 199) = .709$. even though there was a different mean score for each group Applied Science (M= 152.86, SD= 24.844), Social Science (M= 148.56, SD= 21.799) and Formal Science (M= 145.15, SD= 28.422). Based on this, no statistically significant difference was found, therefore, the null hypothesis is accepted, and the alternative hypothesis is rejected. The findings of this research align with Gu (2002) findings that academic major was found to be less potent background factor. Science students slightly outperformed arts students in vocabulary size. However, the findings of this study is different from Boonnoon (2019) findings. She found that the students were moderate in using vocabulary learning strategies, but the students were significant different in using vocabulary learning strategies based on the four academic majors. The reason is likely due to the holistic learning styles of the students. Thus, it is in line with the findings of Nur & Jusoh (2022) since the Indonesian students studying in an ESL learning environment and they passed the Malaysian University English Test (MUET) as a requirement for studying in the country.

4. CONCLUSION

This study investigated the most and least frequently vocabulary learning strategies used by Indonesian learners studying at several public universities in Malaysia based on education levels and academic majors. The findings show that learners most frequently employed “I use a bilingual dictionary

(English/Indonesia)” from *Determination* and “I try to develop my vocabulary knowledge by watching English TV channels (e.g. movies, songs, and documentaries)” from *Metacognitive*. Additionally, “I ask a lecturer for a translation of the new word into Indonesian” from *Social* category as the least frequently used by learners. The results of this study also indicate that there were no statistically significant differences across Indonesian EFL learners in using vocabulary learning strategies based on education levels and academic majors.

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