

EXAMINING THE RELATIONSHIP BETWEEN VOCABULARY KNOWLEDGE AND GENERAL ENGLISH LANGUAGE PROFICIENCY

Nur Fatima Wahida Mohd Nasir¹, Nor Ashikin Ab Manan² & Norrazia Azizan³

^{1,2&3} Academy of Language Studies,

Universiti Teknologi MARA, Perak Branch, Sri Iskandar Campus, Bandar Seri Iskandar,
32610 Seri Iskandar, Perak, Malaysia.

^{1,2 & 3} Corresponding e-mail: nurfa269@perak.uitm.edu.my, noras914@perak.uitm.edu.my &
noraz270@perak.uitm.edu.my

ABSTRACT

The present study intended to examine the relationship between English language proficiency and receptive/ productive vocabulary knowledge of first year diploma students from a public university in Malaysia. The study was conducted among 136 students from the faculty of Architecture, Planning and Surveying to determine this relationship. The students' receptive vocabulary knowledge was measured using Vocabulary Levels Test (VLT) Version 1 by Nation (1990) at 2000, 3000 and 5000-word levels while their productive vocabulary knowledge was measured using Lexical Frequency Profile (Laufer & Nation, 1995). The students' grade for English subject in Sijil Pelajaran Malaysia (SPM) was used as the measure of general proficiency. It can be concluded from the results of regression analysis that more proficient learners have larger vocabulary repertoire which underscores the importance of vocabulary instruction. There is also adequate evidence to support that the students' performance on VLT can be used as predictors of their general proficiency.

Keywords: Receptive vocabulary; productive vocabulary; language proficiency.

INTRODUCTION

Vocabulary learning is crucial in language acquisition. Vocabulary is learnt first, whether in learning the first or subsequent languages. New words are constantly acquired even in our first language. It has been established that lexical competence plays an important role not only in second language (L2) listening (Chang, 2007) but also in L2 writing (Coxhead & Byrd, 2007). According to Kirchner (2013), the vocabulary size of L2 language learners is perceived as an important aspect in evaluating their readiness to learn more of the English language especially for first year tertiary students. They need to have sufficient general and academic vocabulary repertoire to adapt to the university learning environment especially when English is used as the medium of instruction.

Background of the Study

Universiti Teknologi MARA (UiTM) is one of the public universities in Malaysia which uses English as a medium of instruction for both its undergraduate and graduate programmes. All courses (subjects), except for Islamic subjects, are conducted in English. However, many undergraduates from UiTM are not proficient in English. In fact, there is evidence that their English language proficiency do not meet the level expected of tertiary level learners (Adzmi, Bidin, Ibrahim & Jusoff, 2009). It is also observed based on research conducted among UiTM undergraduates that they have poor general and academic vocabulary repertoire (Kaur, 2013; Mokhtar, 2010). Since the success of L2 learning is highly correlated to vocabulary knowledge (Waring & Nation, 2004), their low proficiency in English may be due to insufficient knowledge of English vocabulary. Thus, to evaluate the first year students' readiness in learning more of the English language at tertiary level it is important to determine the level of their vocabulary knowledge.

Research Purpose

The major concern of this study is to examine the relationship between receptive/productive vocabulary knowledge and the learners' general English language proficiency. Its main objectives are to address the following research questions. Firstly, is there significant relationship between the subjects' receptive/productive vocabulary knowledge and their general language proficiency? Secondly, which level of the VLT and Lexical Frequency Profile (LFP) can be used as reliable predictors of proficiency?

LITERATURE REVIEW

Receptive and productive vocabulary knowledge

One dimension of vocabulary knowledge is the distinction between receptive and productive vocabulary. Nation (1990, p.5) has defined receptive or passive vocabulary as "the ability to recognize a word and recall its meaning when it is encountered". According to Nation (1990), receptive or passive vocabulary are words which are initially encountered, learned, comprehended and accumulated in one's memory accordingly via reading and listening. On the other hand, productive vocabulary which is also known as active vocabulary refers to the ability to retrieve the needed vocabulary from memory by using them at appropriate time and in appropriate situations (Nation, 1990; Fan, 2000). L2 learners are found to increase their receptive vocabulary size incrementally and constantly over time (Gallego & Llanach, 2009). Schmitt (2010) adds another crucial component to vocabulary development which are automaticity and fluency. His research shows that automaticity and fluency also play vital roles in receptive and productive knowledge of vocabulary.

VLT

The VLT was first introduced in 1983 by Paul Nation (Nation, 1990). The test was based on word frequency and designed to evaluate learners' receptive vocabulary size that can be considered as an indicator of the coverage of vocabulary in a text. The VLT is divided into five frequency levels: 2000-word level, 3000-word level, 5000-word level, university word level, and 10000-word level. The 2000- and 3000-word levels include high-frequency words in English; the 5000-word level is a boundary level between the high frequency level and low frequency level; and the 10000-word level is composed of low frequency words. Out of 1000 words comprising each level, Nation chose a representative level of 60 words for the test which are based on academic word lists. Thus, the 60 words at each level are divided into 10 blocks of 6, each block containing words of the same class. 3 of the 6 words in each block are being tested which totals up to 30. Students are required to choose 3 words from the list of 6 on the left hand side that matches their paraphrase on the right hand side. The remaining 3 words are purposely included to serve as distractors (Nation, 2004). Table 1 shows the sample of VLT items. As stated by Kirchner (2013) the VLT can be regarded as a useful and trustworthy tool to determine the level of students' vocabulary knowledge as the task requires a passive recognition of words in which the meanings or definitions are not provided but also does not require the subject to know the distractors.

Table 1: Sample of VLT items

1 business	
2 clock	
3 horse	___ part of a house
4 pencil	___ animal with four legs
5 shoe	___ something used for writing
6 wall	

LFP

LFP was developed by Laufer and Nation (1995) to measure productive vocabulary knowledge or 'controlled productive ability'. This measurement of productive vocabulary compares the words used in a text to lists of the first 1000 most frequent words of English and the next 1000 most frequent words. A ratio is then produced showing the percentage of words used in the text in these two categories as well as the percentage of words which fall into neither category. Examples of words that fall outside the two categories are words which are in the level of above the 2000 most frequently used words in English. This test focuses on a controlled production measure of vocabulary consisting of items from five frequency levels and using a completion item type as depicted in Table 2. The test samples 18 items at each of the 2000-, 3000-, 5000-, University Word List (UWL), and 10000-word levels.

Table 2: Sample of LFP item

The garden was full of fra_____ flowers.
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Related Studies Measuring Vocabulary Knowledge

VLT has been used in many studies among undergraduates. Most of the studies were conducted to determine the students' readiness in pursuing tertiary level education. Hazenberg and Hulstijn (1996) conducted a study among first year students of a university in Amsterdam and had found an estimated mean vocabulary size of 11813 from the results of their university entry examination while towards the end of the year the same students acquired 15802 words. Milton and Treffers-Daller's (2011) conducted their study among semester one undergraduates from 3 universities in England and found the average vocabulary size of 7500 of non-native speakers, 9833 of bilinguals and 10,091 of monolingual English speakers. Similar study was conducted among pre-degree Malaysian learners enrolled at a Malaysian public university. It was found that the learners' word mastery level is only between 1000 and 3000 (Kaur, 2013). Meanwhile, Madhubala, Balakrishnan, Sareen and Krishnaveni (2015) who conducted a study among 120 first year undergraduates of a private Malaysian university from three academic programmes found that most of the participants' vocabulary knowledge barely reached the University Word Level. The findings of these studies were used by some of the universities to design appropriate language programmes to help their undergraduates adapt to tertiary level education.

METHODOLOGY

Study Sample

The quasi-experimental study involved 136 students from 6 intact groups. They were first year students from the faculty of Architecture, Planning and Surveying UiTM Perak enrolled in a Proficiency Level English course at the time of data collection. Table 3 shows their demography.

Table 3: The participants' demography

GROUP	GENDER		PROFICIENCY				N
	M	F	Beginner	Low Intermediate	Upper Intermediate	Advance	
G1	11	9		9	9	2	20
G2	10	17	3	7	11	6	27
G3	4	22		6	11	9	26
G4	10	8		5	7	6	18
G5	15	9		7	11	6	24
G6	15	6		5	11	5	21
TOTAL	65	71	3	39	60	34	136

Based on Table 3 it can be seen that 65 participants were males while 71 were females. They were labeled as 'beginner', 'low intermediate', 'upper intermediate' and 'advanced' based on their SPM grades for English. Those who scored 'D' grade were considered as beginners (3

participants), while those who scored 'C' grade were considered as low intermediate (39 participants). Upper intermediate (60 participants) was a label used for those who scored 'B' grade and finally advanced was a label used for those who scored 'A' grade.

Research Instruments

The instrument used to measure the learners' receptive vocabulary was Nation's (1990) VLT. For this study the subjects were tested only at 2000-, 3000- and 5000-word levels. The instrument used to collect the data to measure the learners' productive vocabulary knowledge or 'controlled productive ability' was Laufer and Nation's (1995) LFP. In the study, the participants sat only for 2000- and 3000-word levels of the LFP.

Data Collection Procedure

136 participants from six intact classes participated in the study. The class lecturers administered the VLT to measure the receptive vocabulary level (RVL), and LFP test to measure the productive vocabulary level (PVL) during their Proficiency English classes in the first week of the semester. The participants were given one hour to complete both tests.

Data Analysis

A Statistical Package for the Social Sciences, **SPSS 23 for Windows** was used to analyze the data. Pearson correlation was used to answer the first research question on whether there was significant relationship between receptive/productive vocabulary knowledge and general proficiency. Simple Linear Regression Analysis was conducted to answer the second research question. Firstly, the regression model summary table shows the magnitude of Pearson's correlation coefficient (R) where R^2 provides information about the amount of variance in the dependent variable that can be explained by the independent variable. The regression coefficient table is used to determine whether the independent variable was a significant predictor of the dependent variable (Lay & Khoo, 2009).

RESULTS AND DISCUSSION

Table 4 shows the result of Pearson Correlation analysis between dependent variable (English language proficiency) and independent variables (the scores for **RVL** at 2000-, 3000-, and 5000-word levels as well as the scores for **PVL** at 2000- and 3000-word levels). The results indicate that there is strong positive linear relationship between the participants' scores on RVL3000 and proficiency with $r = 0.521$ while there is a medium positive linear relationship between the participants' scores on RVL2000, RVL5000, PVL2000 and PVL3000 and proficiency with $r = 0.393$, $r = 0.472$, $r = 0.359$, $r = 0.430$ respectively.

Table 4: Pearson Correlation (*r* values)

RVL_2000	Pearson Correlation	.393**
	Sig. (2-tailed)	.000
RVL_3000	Pearson Correlation	.521**
	Sig. (2-tailed)	.000
RVL_5000	Pearson Correlation	.472**
	Sig. (2-tailed)	.000
PVL_2000	Pearson Correlation	.359**
	Sig. (2-tailed)	.000
PVL_3000	Pearson Correlation	.430**
	Sig. (2-tailed)	.000

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

Table 5 shows the results of Simple Linear Regression analysis. The scores on RVL2000, 3000 and 5000 as well as PVL2000 and 3000 can account for 15.5% ($R^2=0.155$), 27.1% ($R^2=.271$), 22.3% ($R^2=.223$), 12.9% ($R^2=.129$), 18.5% ($R^2=.185$) of the variance in proficiency respectively. Beta indices shows that RVL3000 seemed to be a stronger predictor of language proficiency (0.521) followed by RVL5000 (0.472), PVL3000 (0.430), RVL2000 (0.393) and finally PVL2000 (0.359).

Table 5: Regression model and regression coefficient

Variable	R ²	F	Sig	Beta	t	Sig
RVL2000	.155	24.54	0.00 ^a	.393	4.95	0.00
RVL3000	.271	29.796	0.00 ^a	.521	7.057	0.00
RVL5000	.223	38.37	0.00 ^a	.472	6.917	0.00
PVL2000	.129	19.878	0.00 ^a	.359	4.46	0.00
PVL3000	.185	30.4	0.00 ^a	.430	5.514	0.00

a. Predictors: (Constant), RVL2000, RVL3000, RVL5000, PVL2000, PVL3000

CONCLUSION AND SUGGESTIONS

Conclusion

It was found that there is significant positive linear relationship between vocabulary knowledge and general proficiency. Thus, it can be concluded from the results that more proficient learners have larger vocabulary repertoire. There is also adequate evidence to support that the students' performance on VLT and LFP can be used as predictors of their general proficiency. RVL3000 seemed to be a stronger predictor of language proficiency (0.521) followed by RVL5000 (0.472), PVL3000 (0.430), RVL2000 (0.393) and finally PVL2000 (0.359).

Implications and Significance of the Study

Other than adding to the pool of data in the field of L2 acquisition on the importance of vocabulary in language learning, the information gathered from the study can be used as evidence that supports the importance of vocabulary instruction at tertiary level. The findings of the study also have pedagogical implications. ESL educators should conduct vocabulary enhancement activities in their classrooms to improve the students' vocabulary size.

Limitations

The instruments used in the study were chosen because they were easily available, reliable, valid and practical to use. The tests have also been empirically validated by other researchers (Schmitt, Schmitt & Clapham, 2001; Beglar & Hunt, 1999). There is a new version of the VLT by McLean and Kramer (2015) which claimed to be more robust but it is not easily accessible and at the time this article was written, the test has only been validated by the test developer themselves.

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