
An Exploration of Breadth and Depth of EFL Learners' Vocabulary Strategy Use Using Structural Equation Modeling

Behzad Hayatbakhsh Abbasi¹, Mehry Haddad Narafshan^{2*}, Peyman Seifadini³

¹Ph.D. Candidate, Department of English Language, Kerman Branch, Islamic Azad University, Kerman, Iran

^{2*}Assistant Professor, Department of English Language, Kerman Branch, Islamic Azad University, Kerman, Iran

³Assistant Professor, Department of English Language, Kerman Branch, Islamic Azad University, Kerman, Iran

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Abstract

Appropriate language learning strategies result in improved proficiency among EFL learners. This paper aimed to investigate the relationship between vocabulary learning strategy use and the breadth and depth of vocabulary knowledge of EFL learners using structural equation modeling. To fulfill this goal, 200 EFL learners, mainly intermediate level, both genders using cluster sampling procedure, established the participated of the study. Three instruments were used to collect the data: the vocabulary learning strategies survey, the depth and breadth of vocabulary test, and the vocabulary levels test. Friedman's test results showed that the proportion of using word learning strategies was not the same among the respondents (p -value < 0.05). A comparison of the frequency of using strategies indicates that the MEMORY strategy with (69%) was used more than others and the DETERMINATION strategy with (2.5%) was the least used by the respondents. Also, none of the respondents used the SOCIAL vocabulary learning strategy and METACOGNITIVE strategy. Finally, the relationship between DETERMINATION strategy and Breadth of vocabulary knowledge, SOCIAL vocabulary learning strategy and Breadth of vocabulary knowledge, MEMORY learning strategy and Breadth of knowledge, COGNITIVE learning strategy and Breadth of knowledge, METACOGNITIVE learning strategy and Breadth of knowledge, SOCIAL learning strategy and Depth of knowledge, COGNITIVE learning strategy and Depth of knowledge and METACOGNITIVE learning strategy and Depth of vocabulary knowledge is not significant (p -value > 0.05). These findings have implications for teachers, students and English language teaching policymakers.

Keywords: Vocabulary use, Strategy, Breadth and depth of vocabulary, Equation modeling

INTRODUCTION

Of all the language skills, it is widely acknowledged that vocabulary is a very important part in English language learning, and no one can communicate in any meaningful way without vocabulary (Flower, 2000; Kitajima, 2001; N. Schmitt, 2000). McCarthy

(1990) indicated that the single, biggest component of any language course is vocabulary. This is consistent with Nation (2022) who affirms that learners also see vocabulary as being a very, if not the most, important element in language learning. Learners feel that many of their difficulties, in both receptive and productive language use, result from the lack of vocabulary knowledge.

*Corresponding Author's Email:
mehri.narafshan@yahoo.com

However, many scholars in the fields of vocabulary learning and teaching (e.g. Hedge, 2001; Richards, 1985; Zimmerman, 1997) indicate that vocabulary has long been neglected in the language classroom. Consequently, the main purpose of this section is to study and review the importance of vocabulary in language learning so as to look at what we know about English vocabulary as well as to reflect on how this has been applied in language teaching and learning.

Flower (2000) stated, "Words are the most important things students must learn. Grammar is important, but vocabulary is much more important". This is consistent with Grove (1994) who also views the importance of vocabulary as the center of language teaching and learning since language consists of 'grammaticalized lexis, not lexicalized grammar' and 'grammar, as structure, is subordinate to lexis'. That is to say, these scholars see that the words are preceded by the grammar. This confirms what we know from our own experience that one can understand others even if they pronounce words badly, and make grammatical mistakes, but without the mediation of words, any meaningful way of communication is rather impossible. To be precise, vocabulary seems to be the key to language learning, and thus, is accepted to be more important than grammar. This paper aimed at investigating the relationship between vocabulary learning strategy and the breadth and depth of vocabulary knowledge of the EFL learners using structural equation modeling.

Strategies are the mental and communicative procedures learners use in order to learn and use language (Nunan, 1999). Learning strategies are "particular approaches or techniques that learners employ to try to learn a second language" (Ellis, 1997), or "the thoughts and actions that individuals use to accomplish a learning goal" (Chamot, 2004). Likewise, language learning strategies are defined as "the special thoughts or behaviors that individuals use to help them comprehend, learn, or retain new information" (O'malley & Chamot, 1990). Further, Oxford (1990) has specifically defined learning strategies as "tools for active, self-directed involvement,

which is essential for developing communicative competence. Appropriate language learning strategies result in improved proficiency and greater self-confidence". The main purpose of language learning strategies taken by learners are "to make learning easier, faster, more enjoyable, more self-directed, and more transferable to new situations" (Oxford, 1990).

LITERATURE REVIEW

In classifying vocabulary learning strategies, scholars have proposed and implemented different ways of classifications (Fan, 2020; Intaraprasert, 2004; Zhang & Lu, 2015). These classification systems give a crucial contribution to the area of vocabulary strategies. They in parts have been used in different contexts and for diverse objectives.

Rubin and Thompson (1982) formulated three main categories of strategies for vocabulary learning that have been reported by language learners to be effective. These include Direct Approach, Use Mnemonics, and Indirect Approach. In Direct Approach, language learners pay attention on learning words in lists or completing various vocabulary exercises. Mnemonics are techniques that make memorization easier by organizing individual items into patterns and linking things together. In Indirect Approach, a lot of vocabulary is learned through reading and listening; therefore, it is crucial to focus on strategies for dealing with unfamiliar words indirectly instead of memorizing them.

In the same manner, Stöffer (1995) made a substantial list of vocabulary learning strategies employed by 707 university language learners at the University of Alabama enrolling Japanese, Russian, German, French and Spanish as foreign languages. The research work showed that vocabulary learning strategies were related to several individual difference variables such as previous language learning experience, course level, language studied, previous vocabulary learning strategies instruction, age, and gender.

Gu and Johnson (1996) in the same manner made use of a questionnaire to investigate Chinese advanced learners' use of English

vocabulary learning strategies. Based on this study, they classified vocabulary in terms of metacognitive regulation, guessing strategies, dictionary strategies, note-taking strategies, memory strategies (rehearsal and encoding) and finally activation strategies.

Lawson and Hogben (1996) moreover classified vocabulary learning strategies based on the information obtained through the think-aloud procedure. Their strategy was classified in terms of four different categories of repetition, word feature analysis, simple elaboration, and finally complex elaboration.

Weaver (1997) introduced Strategies-Based Instruction according to the teacher-training manual. They classified strategies into six main categories of as Categorization, Keyword mnemonics, Visualization, Rhyme/Rhythm, Language Transfer, and Repetition. These strategies were found to share similar characteristics of words in terms of word meaning, word form, and word use.

Vocabulary learning strategies identified by Hedge (2001) were classified under two main categories, namely, Cognitive and Metacognitive strategies. Cognitive strategies concern strategies for using the vocabulary and for understanding how vocabulary works. Metacognitive strategies generally involve preparing, planning for learning, selecting, and using learning strategies, monitoring strategy use, orchestrating various kinds of strategies, and evaluating the effectiveness of strategy use and learning.

Cook (2016) identified two main categories for understanding and using vocabulary which include strategies for getting meaning, and strategies for acquiring words. She suggested language learners can get meaning of vocabulary items by guessing the meaning from context, using a dictionary, making deductions from the word form, and linking vocabulary items to cognates.

Nation (2022) provided a taxonomy of vocabulary learning strategies, which are grouped under the three main categories of planning divided into four sub-categories, finding information, and establishing knowledge. From the features of all three main categories of vocabulary learning strategies,

they could be assumed that vocabulary learning strategies proposed by Nation involve both cognitive and metacognitive strategies since both include a wide range of strategies of different complexity.

Concerning the vocabulary learning problem of Iranian EFL learners, studies noticed that the teaching methods and current teaching systems do not pay the required attention to the procedures that are used in order to assist the learners to master L2 vocabulary (Amirian et al., 2015; Shoari & Elnaz, 2017). Studies in the fields of vocabulary learning and teaching (e.g. Hedge, 2001; Richards, 1976, 1985; Zimmerman, 1997) indicate that vocabulary has long been neglected in the language classroom. For instance, it can easily be seen that in some educational settings, rote memorization is emphasized over cognitive and contextual presentation of vocabularies, and the students are taught using short term memorization techniques (Fahim & Ahmadi, 2012).

As it has been stated in the literature, the situation is more complicated for the Iranian EFL learners (Amirian et al., 2015; Fahim & Ahmadi, 2012; Shoari & Elnaz, 2017) Any difficulty in using English vocabularies is directly reflected in the failure of using other language skills. This failure has been documented and empirically supported in some studies (e.g., Alemi & Tayebi, 2011; Amirian et al., 2015; Soureshjani, 2011).

EFL teachers should realize how and what important vocabulary learning strategies are and encourage learners to apply them in vocabulary learning. Students themselves need to be informed of the benefits of vocabulary learning strategies, to know their limitation in using vocabulary learning strategies, and to take more responsibility for their own vocabulary learning. The findings of this study can be used practically for language teachers, practitioners, and textbook designers to achieve additional ideas and information about vocabulary learning and the challenges related to it. Language teachers and researchers have been keen in searching for effective approaches to enhance vocabulary learning (Fan, 2020; Zhang & Lu, 2015).

Nirattisai and Chiramanee (2014) explored the university students' vocabulary learning strategies, and the relationship between vocabulary learning strategies and vocabulary size on 257 non-English learners. Two instruments were used to collect the data: vocabulary learning strategy questionnaire and the bilingual English-Thai of vocabulary test. The results showed the learners employed the overall vocabulary learning strategies very slightly. Of thirty-nine given vocabulary learning strategies, the participants used only two major strategies belonging to high level, 18 to moderate level, and 19 strategies at a low level. It was observed the use of the overall vocabulary learning strategies was moderately correlated with their vocabulary size. On the other hand, about 17 vocabulary learning strategies were correlated with their vocabulary size.

Komol and Sripetpun (2014) investigated English vocabulary learning strategies used by second - year university students. The study followed two objectives: identifying the use of vocabulary learning strategies and finding the differences in vocabulary learning strategies. The participants were composed of 192 students divided into two groups. They were asked to rate the frequency of use of vocabularies and learning strategies using a questionnaire adapted from Schmitt's VLS taxonomy. Statistical analysis revealed that determination strategies were the most over-used; however, social strategies were the least being used by all subjects. T-tests revealed a significant difference at the 0.01 level between the students with high and low vocabulary size. Moreover, the correlation analysis revealed that the relationship existed between vocabulary learning strategy use and vocabulary size scores.

Amirian and Heshmatifar (2013) set to explore the strategies that were more frequently used for learning vocabulary among a group of EFL university learners. To collect the data, a questionnaire exploring the taxonomy of vocabulary learning strategies (VLS) was employed to a population of 74 learners. In addition, a semi-structured interview was run. The results showed the following order of strategy use: determination, cognitive, memory, metacognitive, and social strate-

gies. Finally, the achievements proved that the learners preferred guessing from context and dictionary use strategies to other strategies.

Fan (2020) explored the use of vocabulary learning strategies and its relationship with vocabulary knowledge of Chinese EFL learners concerning their proficiency, gender, and discipline. Structural equation models were employed using exploratory factor analysis and confirmatory factor analysis. The data of the study were based on 419 sophomores' strategy use, test of vocabulary Size scores, Word Associates Test, and gender and discipline categories. It was revealed that proficiency could predict attention and guessing but there was a negative predictor of socializing. Moreover, strategy features, gender characteristics, disciplinary influence, the EFL context and culture, as well as effective learning were interrelated.

Enayat and Amirian (2020) in their study investigated if any relationship existed between the EFL learners' depth and size of vocabulary. 122 Iranian EFL learners classified into three proficiency levels established the participants of the study. To collect the data, the Test of Word Associates Test, Vocabulary Levels Test, the monolingual Vocabulary Size Test and the bilingual Persian version were employed. The study achievements showed that the size and depth vocabulary were significantly correlated. Moreover, the size and depth of vocabularies were associated with the upper- intermediate participants; and that no significant correlation was observed between the size and depth of vocabulary.

Rahimy and Shams (2012) aimed at investigating the impact of vocabulary learning strategies on the vocabulary scores of Iranian EFL learners. To this purpose, 50 EFL learners were randomly selected. Oxford Placement Test was administered to determine the level of the learners. Moreover, tests of vocabulary containing 20 questions was given to the learners. Besides, a questionnaire of vocabulary learning strategies was distributed among the students to make clear the way learners learned new vocabulary. It was finally revealed that there was a significant effect of vocabulary learning strategies on

EFL learners' performance in a vocabulary test.

The present study has adapted the kind of taxonomy proposed and practiced by Schmitt (2020) According to this taxonomy, being based on Oxford's (1990) memory, cognitive, compensation, metacognitive, affective, and social categories, two major classes of strategies were identified 1) strategies that are useful for the initial discovery of a word's meaning, and 2) those useful for consolidating a word once it has been encountered. Based on strategies for discovering meaning, bilingual dictionaries, asking teacher for paraphrase/synonym, and analyzing pictures or gestures were the strong preferences. In terms of strategies for consolidating meaning, written repetition, connect word with synonyms/antonyms, continue overtime, study spelling, take notes in class, and verbal repetition were preferred. Thus, this taxonomy has been preferred since it focuses on the major categories of determination strategies, social strategies, memory strategies, cognitive strategies, and finally metacognitive strategies.

For this study, two questions were designed to estimate the use of vocabulary learning strategies and the relationship between and depth and the participants' breadth of vocabulary knowledge.

RQ1. *What is the interactive relationship between learners' vocabulary learning strategy use, depth & breadth of vocabulary knowledge?*

RQ2. *What are the most & least used vocabulary learning strategies by the subjects in second language vocabulary learning?*

METHOD

The present study is quantitative in nature following a structural equation modelling requiring a large-number of samples, questionnaires and tests.

A total of 200 EFL students, mainly intermediate level, both male and female, aged 20 to 30, were selected to participate in the study. Convenient sampling procedures were used for the study because it was the most suitable method for selecting the participants. By com-

paring and analyzing the vocabulary level of the participants using breadth and depth questionnaires, it was found that the participants were in the same range to be considered suitable to take part in this study. This is why, the learners' proficiency level and their variation in depth and breadth of vocabulary knowledge was considered to be appropriate for the focus of the current study. The tables below show the gender and age of the participants. Compared to the previous studies conducted by Fan (2020) with 419 participants Zhang and Lu (2015) with 150 participants the sample is appropriate in size, that is 200 participants due to the entity of the data analysis method.

Three instruments were used to satisfy the need for data collection: the vocabulary learning strategies survey, the depth of vocabulary knowledge test and the vocabulary levels test.

The vocabulary learning strategies survey developed by Schmitt (Schmitt et al., 2001) was adopted in the current study. It was meant to gauge learners' use of vocabulary learning strategies and contained 58 items using a 6-point Likert scale (ranging from never to always). Grounded in cognitive and metacognitive theories, the survey allowed the researcher to capture learners' use of a wide variety of vocabulary learning strategies, including determination, social, cognitive, metacognitive, and memory strategies. Using Alfa Cronbach, the reliability of the questionnaire was estimated to be .89. Besides, the questionnaire proved to be valid since it has already been used for the estimation of vocabulary learning strategies in different studies.

The next instrument was using the Depth of Vocabulary Knowledge Test so as to estimate the depth of vocabulary knowledge of the subjects. Read (2013) developed Word Association Test (WAT) and claimed that it could be used to measure depth of receptive vocabulary knowledge with high reliability. The test contained 40 blocks, each consisted of one target adjective and two boxes. The left box contains four potential synonyms of the target adjective, while the right box contains four potential collocates of the target adjective. The higher the total score of the test, the higher would be the depth of vocabulary knowledge.

This is a widely used test to measure depth of vocabulary knowledge in several studies. The validity and reliability of the study was ensured since it has been reported to be used in different studies for this purpose.

Schmitt et al. (2001) presented two reliable approaches for scoring the depth of vocabulary knowledge test (DVKT). The first approach is the so-called all-or-nothing approach, in which only responses that hit all the correct answers are counted. In the second approach, all responses that hit more than one correct answer are counted. Responses that hit all four correct answers receive four points each, as they demonstrate full knowledge. The second approach was adopted in the current study to account for partial knowledge, as we consider the acquisition of vocabulary knowledge to be incremental (Henriksen, 1999) rather than all-or-nothing (N. Schmitt, 2000). In addition, since the vocabulary level test (VLT) also tests partial knowledge (Schmitt et al., 2001), this approach allows us to maintain consistency between the two tests.

Schmitt, Schmitt, and Clapham's (2001) version of the Vocabulary Levels Test (VLT) was used to assess meaning recognition. The VLT has been proven to be a valid instrument for estimating English learners' knowledge of words at different frequency levels (Schmitt et al., 2001) and is arguably the most widely used test for measuring breadth of vocabulary knowledge (Schmitt & Schmitt, 2020). The VLT consists of five sections, each testing passive knowledge of 30 target words of either a particular frequency

level or the academic level, with a total of 150 target words. The frequency levels represented in the test are the 2,000 level, the 3,000 level, the 5,000 level, and the 10,000 level, with the 2,000-level containing the top 2,000 most frequent words, the 3,000 level containing words with the frequency ranks of 2,001 to 3,000, and so on. The 30 target words in each section of the VLT are presented in 10 blocks. Each block includes three target words and three distracting words in the left column and three definitions in the right column. Participants were asked to match each definition with the corresponding target word. Each correct match earns 1 point, with a total of 30 points per section and a total of 150 points for the entire test.

RESULTS

To answer the first question, the data in Table 1 presents the information. It examines five strategies of determination (DET), social (SOC), cognitive (COG), metacognitive (MET), and memory (MEM). The chi-square test results show that the proportion of using word learning strategies was not the same among the respondents (p -value < 0.05). A comparison of the frequency of using strategies indicates that the MEMORY vocabulary learning strategy (69%) was used more than others and the DETERMINATION vocabulary learning strategy with (2.5%) was the least used by the respondents. Also, none of the respondents had used SOCIAL vocabulary learning strategy or a metacognitive vocabulary learning strategy to learn words.

Table 1
Examining the ratio of using the word learning strategies

Var	Fre	Percent	Chi Square	P-value
DET	5	2.5	134.770	0.001
SOC	0	0.0		
MEM	138	69.0		
COG	57	28.5		
MET	0	0.0		

To answer the second question, structural equation modeling approach being a powerful tool in the hand of the researcher was implemented. The strength of the relationship between

the factor (hidden variable) and the observable variable is shown by factor loading. The higher the factor loading value of an index in relation to a specific structure, the greater the contribution

of that index to the explanation of that structure. Also, if the factor loading of an index is negative, it indicates the negative effect of that index in explaining the related structure. If the factor loading of the index is more than 0.6, it is considered as a high factor loading (regardless of the negative or positive sign) and if it is more than 0.3, it is considered as a relatively high factor loading. Loadings less than 0.3 can be ignored. When the correlation of the variables is identified, a significance test should be performed. To check the significance of the relationship between the variables, the t-test statistic or t-value is used. Because significance is examined at the error level of 0.05, therefore, if the t statistic of the observed factor loadings is smaller than 1.96 or larger than -1.96, the relationship is not significant.

Before examining the proposed research model, the presuppositions of the structural equations have been fully examined and confirmed in terms of the following analysis.

Data screening: Data screening includes identifying and adjusting missing data and outlier data (Cornell et al., 2012). For this purpose, the questionnaires that have many unanswered items can be excluded from the sample, and single-variable outlier data can be identified with the help of measuring the standard score (z-scores) and brought closer to the mean. Mahalanobis statistic was used to investigate multivariate outlier data. In the presented model, the assumption of multivariate outlier data was investigated using the mentioned statistic and there was no data to be deleted.

Non- multicollinearity: In data analysis, when predictor variables are correlated among themselves, it is said that there is multiple collinearities between them. Multiple collinearity occurs when two or more predictor variables have a high correlation with each other. The meaning of correlation here is the existence of a linear relationship between predictor variables. In statistics, the variance inflation factor evaluates the severity of multiple collinearity in ordinary least squares regression analysis. If the research variables have a variance inflation factor of less than 10, the assumption of non-collinearity between the

variables has been observed. In the presented model, according to the values obtained in Table 4-4, it can be said that there is no multicollinearity between the variables of the research, so this assumption is maintained in the presented model.

Table 2
Examining collinearity among research variables

Variable	VIF
DET	1.351
SOC	2.416
MEM	3.123
COG	1.607
MET	1.991
Breadth	1.872
Depth	1.990

The results presented in Table 3 show a significant relationship between DETERMINATION vocabulary learning strategy and Depth of vocabulary knowledge ($p < 0.05$, $\beta = 0.200$). Considering the positive-ness of the path coefficient, this relationship is of an incremental (direct) type. This means that by increasing and improving DETERMINATION vocabulary learning strategy feature, the ground for increasing and improving the Depth of vocabulary knowledge score is provided. The results of Table 3 show a significant and decreasing relationship between MEMORY vocabulary learning strategy and Depth of vocabulary knowledge ($p < 0.05$, $\beta = -0.244$). Also, the relationship between DETERMINATION vocabulary learning strategy and Breadth of vocabulary knowledge, SOCIAL vocabulary learning strategy and Breadth of vocabulary knowledge, MEMORY vocabulary learning strategy and Breadth of vocabulary knowledge, COGNITIVE vocabulary learning strategy and Breadth of vocabulary knowledge, METACOGNITIVE vocabulary learning strategy and Breadth of vocabulary knowledge, SOCIAL vocabulary learning strategy and Depth of vocabulary knowledge, COGNITIVE vocabulary learning strategy and Depth of vocabulary knowledge and METACOGNITIVE vocabulary learning strategy and Depth of vocabulary knowledge is not significant ($p\text{-value} > 0.05$).

Table 3
Examining the relationship between variables in the second hypothesis of the research

Hypothesis	Path	t statistic	P-value
DET→Breadth	0.045	0.580	0.562
SOC→ Breadth	-0.039	-0.380	0.704
Breadth→ MEM	0.037	0.343	0.731
COG→ Breadth	0.107	1.361	0.173
MET→ Breadth	-0.065	-0.871	0.384
DET→Depth	0.200	2.677	0.007
SOC→ Depth	0.062	0.622	0.534
MEM→ Depth	-0.244	-2.352	0.019
COG→ Depth	0.017	0.222	0.824
MET→ Breadth	-0.017	-0.242	0.809

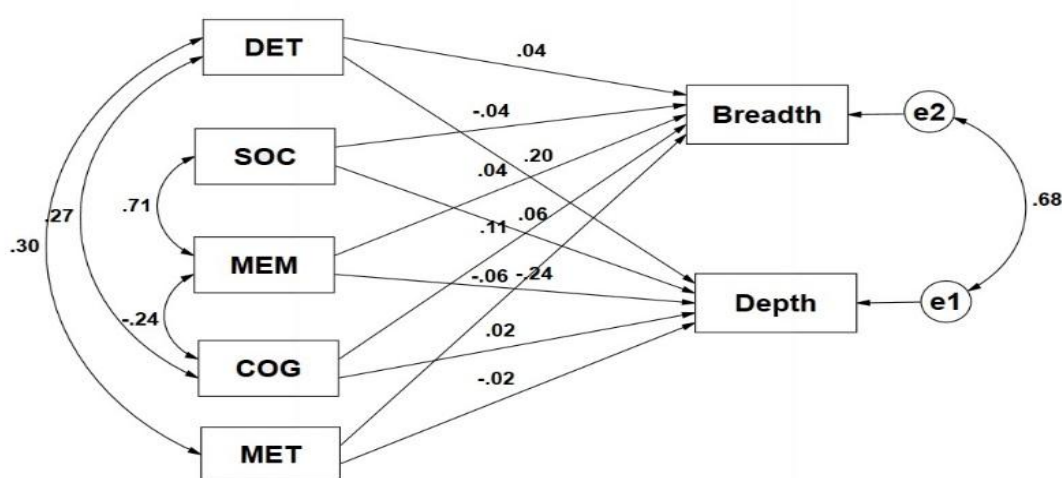


Figure 1

Significant coefficients of research variables in strategies and breadth and depth of vocabulary acquisition

The diagram presents the same type of relationship between the two variables of strategies and type of vocabulary knowledge. It shows that there is a meaningful relationship between DETERMINATION strategy and Depth of vocabulary knowledge ($p < 0.05$, $\beta = 0.200$). It indicates the idea that as determination is developed among the learners, in the same manner, other factors such as depth of vocabulary

knowledge can be fostered too. The graph the same of table 3 offers the same type of relationship.

The results of Friedman's test in Table 4 show that vocabulary learning strategies do not have the same rank and MEMORY, DETERMINATION and COGNITIVE vocabulary learning strategies were the most used among the respondents respectively ($p\text{-value} < 0.05$).

Table 4
Ranking of vocabulary learning strategies

Group	Mean Rank	Rank	Chi-Square	p-Value
DET	3.54	2	351.002	0.001
SOC	2.10	4		
MEM	4.16	1		
COG	3.50	3		
MET	1.71	5		



Figure 2
Radar graph of vocabulary learning strategies ranking

The results of the Friedman test in Table 5 show that the questions related to vocabulary learning strategies do not have the same rank and questions 5, 54, 6, 45, 29, 7, 46, 49, 50

and 53 respectively have the highest average and questions 25, 23, 10, 26, 24, 14, 30, 35, 36 and 16 respectively have the lowest average among the respondents (p-value <0.05).

Table 5
Ranking of vocabulary learning strategies questions

Question	Mean Rank	Rank	Chi-Square	p-Value
1. I analyze the part of speech	35.62	11		
I analyze the word affixes and roots	32.28	22		
I check for an L1 cognate (I try to link the English word to a Persian word that reminds me of the former's form and meaning, e.g., television-television)	32.15	24		
I analyze any available picture or gesture ...	31.37	25		
I try to guess the words meaning from the ...	44.08	1		
I look for the words meaning in a monolingual ...	41.33	3		
I look for the words meaning in a bilingual ...	38.10	6		
I learn the word through English-Persian ...	28.37	30		
I deduce the meaning of the word from flashcards ...	26.22	38		
I ask the teacher for an L1 translation ...	19.64	56		
I ask the teacher for a paraphrase or synonym ...	30.59	26	1924.781	0.001
I ask the teacher for a sentence including ...	29.81	28		
I ask the classmates for the ...	27.00	35		
I discover the new meaning through ...	20.97	53		
I study & practice meaning in pairs/groups ...	23.45	47		
keep a word list/card & my teacher ...	22.16	49		
I try to use the new word in interactions ...	28.14	31		
I study the new word with a pictorial representation ...	24.94	43		
I study the new word by forming an image ...	27.09	34		
I connect the word meaning to a personal ...	25.23	42		
I associate the words with its word coordinates.	25.56	40		
I connect the word to its synonyms ...	34.88	14		
I use semantic maps ...	19.60	57		

I use scales for gradable adjectives ...	20.65	54
I use the peg method ...	16.22	58
I use the loci method ...	20.38	55
I group words together to study them ..	24.85	44
I group words together specially ...	22.45	48
I learn the new word in an English ...	38.73	5
I group words together ...	21.19	52
I study the spelling of the word ...	33.10	18
I study the sound of the word ...	35.38	13
I say the new word aloud ...	32.16	23
I image the word form.	26.97	36
I underline the initial letter ...	21.49	51
I configure the word ...	21.50	50
I use the keyword method ...	24.35	45
I try to remember the word affixes ...	34.00	16
I try to relate the word ...	30.34	27
I paraphrase the words meaning ...	26.14	39
I connect the word to cognates ...	27.39	32
I learn the words of an idiom ..	26.60	37
I use physical action to learn ...	25.52	41
I use semantic feature grids ...	27.33	33
I use verbal repetition ...	40.73	4
I write the word several times.	37.82	7
I use word lists & revise ...	35.44	12
I use flashcards with representation ...	33.22	17
I take notes about word ...	37.09	8
I revise the vocabulary section ...	36.26	9
I listen to MP3s ...	33.00	19
I put English labels on physical ...	32.38	21
I keep a vocabulary notebook.	36.01	10
I use English language media ...	43.92	2
I test myself with word lists.	34.75	15
I use space word practice ...	28.79	29
I skip or pass the new word (I ignore it)	23.60	46
I continue to study the word over time.	32.74	20

DISCUSSION

During the course of this study many facts and aspects of the vocabulary learning strategies have been discussed. As we already know, there are and continue to be several definitions for what constitutes a vocabulary learning strategy, and none of those definitions is absolutely agreed upon by the experts of the field. The present study has managed to discuss only some of the most renowned definitions for a vocabulary learning strategy. Correspondingly, one must also keep in mind that there are several (and altogether different) taxonomies compiled by individual experts. Only a couple of these taxonomies have been introduced in greater length in the current study.

The general opinion on vocabulary learning strategies is that they improve students' learning skills and bring about better learning results. Several claims have been made those certain types of (vocabulary) learning strategies might actually be more effective than others. Indeed, experts seem to agree on the superiority of the so-called deep learning strategies and the fact that they would be more beneficial to EFL students than the so-called shallow strategies. The archetype of deep strategies in vocabulary learning is often manifested in mental imagery techniques (complex manipulation of the content). Such techniques as the keyword method require the learner to make his/her own unique connec-

tions (in this case an acoustic link) between the target language word and the first language word. The shallow learning strategies in vocabulary learning have often come to mean a repetitive action, for instance, repeating words out loud from wordlists until they have been memorized.

According to the data of table 5 that shows the learning priorities of the subjects, it is clear that learners have a strong tendency to improve their vocabulary knowledge using different strategies. The first is the techniques of guessing the meaning of unknown words, the strategy that teacher normally encourage their students to follow.

It has been discussed that while reading in EFL context, language learners naturally face unfamiliar words that appear in the relevant context. However, visiting some limited unknown words may not block general comprehension of the text. It is important to know when readers face a large number of unknown and the most essential ones in the text, their reading comprehension may be impaired (Kanatlar, 1995; Soria, 2001). In such a condition, language learners use a variety of strategies such as ignoring unknown words, consulting a dictionary or guessing word meaning from context in order to comprehend reading passages (Fraser, 1999; Harley & Hart, 2000). Guessing word meaning from context (lexical inferencing) is a compensation strategy for L1 and L2 reading comprehension (Bialystok, 1983; Soria, 2001) and it “involves making informed guesses as to the meaning of a word in the light of all available linguistic cues in combinations with the learner’s general knowledge of the world, her awareness of context and her relevant linguistic knowledge” (Haastrup, 1991). The use of this strategy is confirmed based on the achievements of this study. According to the investigation stated above, the first over-used strategy that is implemented by 200 subjects of this study was the use of “guessing meaning from context”. This achievement is compatible with other studies. In fact, research indicates that contextual guessing is one of the most favored strategy (Harley & Hart, 2000; Paribakht & Wesche, 1999). Similarly, in a study by Fraser

(1999), it was found that inferring was a more preferred strategy (44%) than consulting (29%), ignoring (24%) and no attention (4%). Considering these research findings, it can be said that language learners try to generate a hypothesis about the meaning of an unknown word based on some information in the word and in the text. The traditional use of monolingual and bilingual dictionaries are other dominant strategies that stands in the third and fifth and sixth levels of vocabulary strategy use. Although several studies have promoted the less traditional deep learning strategies, there are also studies that have questioned their superiority over the more traditional and simpler shallow ones which learners often prefer. For instance, Cohen (1988) states that strategies are not either “inherently good or bad” as such and goes on to explain that the “good, effective and successful” results that students get (or do not get) usually depend on the way they have been used. In other words, the effectiveness of the strategies is more a question of what is appropriate (or indeed inappropriate) to use to solve different language learning tasks (Gu & Johnson, 1996; Oxford, 1990).

Using the new words in writing and conversation is the next strategy that help the learners improve their range of vocabulary. The learning results are directly affected by and dependent on the student’s active participation and goal-directed action in the learning situations. In short, the learner is an independent and self-initiating agent who is highly responsible of his/her own learning, and that the learning results are also dependent on the learning strategies in the learner’s use. Students should be able to set their own learning goals and learn to work independently and that “they must be given opportunities to test and find working methods suitable for their own learning style. In short, a learner needs to build up a repertoire of vocabulary learning strategies and tactics of different kinds in order to become independent and autonomous enough to continue learning on his/her own without outside instruction.

The general opinion on vocabulary learning strategies is that they improve students’ learning skills and bring about better learning results.

Several claims have been made those certain types of (vocabulary) learning strategies might actually be more effective than others. Indeed, experts seem to agree on the superiority of the so-called deep learning strategies and the fact that they would be more beneficial to EFL students than the so-called shallow strategies. The archetype of deep strategies in vocabulary learning is often manifested in the mental imagery techniques (complex manipulation of the content). Such techniques as the keyword method require the learner to make his/her own unique connections (in this case an acoustic link) between the target language word and the first language word. The shallow learning strategies in vocabulary learning have often come to mean a repetitive action, for instance, repeating words out loud from wordlists until they have been memorized.

CONCLUSION

These findings show that there is not just one vocabulary learning strategy available for learners but it is possible that they make use of the one that is most compatible to their learning style and even to the situation that they are trying to use that word. According to the results of this research, students seem to mainly stick to some particular vocabulary strategy use whereas they completely overlook the others. If we consider this gap as a problem in students learning skills, there should be a way that teachers fill this gap by teaching them the other strategies which their students can make use of. By doing so, they could make them more aware of their learning process. Only this way students may practice to use different strategies to find out which one is more compatible to their learning style. If they are expert enough to try different strategies to see which one works better, they will learn new vocabularies with less effort and higher speed.

The outcomes of the present study may affect the methods of teaching used by teachers and also it may change the learning plan of the students. Teachers as the helpers and instructors can think of teaching different learning strategies for their students and make them aware of their own learning skills. Students, on the other hand, can try to find the best strategy

that fits their learning skills and at the same time try to be more flexible in learning different strategies.

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Biodata

Behzad Hayatbakhsh Abbasi is a Ph.D. candidate of TEFL at English Department of Islamic Azad University, Kerman Branch, Kerman. His Ph.D. dissertation is “Learners’ Learning Strategies Use in Second Language Vocabulary Learning and its Interactive Relationship with Learners’ Learning Style, Breadth and Depth of Vocabulary Knowledge: A Structural Equation Modeling Study”. He is interested in research on learners’ learning styles and learners’ autonomy in learning language.

Email: *behzad9365@yahoo.com*

Mehry Haddad Narafshan is an assistant professor of TEFL in the Department of Foreign Languages, Kerman Branch, Islamic Azad University, Kerman, Iran. Her research interests include language learning and development, special needs education, learners’ character development, culture, and identity issues. She has taught, coordinated, and supervised several courses and projects within the department. She has authored or co-authored different papers and delivered several talks/seminars at international/national conferences.

Email: *mehri.narafshan@yahoo.com*

Peyman Seifadini is an assistant professor of TEFL in the Department of Foreign Languages, Kerman Branch, Islamic Azad University, Kerman, Iran. His research interests include vocabulary learning.

Email: *peyman_seaf@yahoo.com*