THE RELATIONSHIP BETWEEN LANGUAGE LEARNING STRATEGIES AND VOCABULARY SIZE AMONG IRAQI EFL UNIVERSITY STUDENTS

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ABSTRACT

This study examines the relationship between Language Learning Strategies (LLSs) and Vocabulary Size (VS). For this purpose, a total of 122 undergraduate Iraqi EFL learners at a state university were recruited. To investigate LLSs, a questionnaire was administered while the assessment of VS was done with Vocabulary Levels Test (VLT). To amplify quantitative results, a qualitative element in the form of semi-structured interviews with a group of eight students was conducted. The results revealed that the average reported frequency of strategy use across all students was moderate. Additionally, the students with High Vocabulary Size (HVS) and Low Vocabulary Size (LVS) employed metacognitive strategies most frequently. Results also revealed a significant correlation between LLSs and HVS. Moreover, a statistically significant difference was obtained between the learners with HVS and LVS with regard to their use of LLSs. On the other hand, the results from the interviews showed the priority of the students with HVS in LLS use. It was concluded that the comments and remarks of the participants urged the need to strategy training. Regarding VS, more efforts are needed to enhance learners' VS, especially for technical vocabulary.

Keywords: Language Learning, Language Learning Strategies, Vocabulary Size.

INTRODUCTION

LLSs are complex constructs and different notions are presented about them. However, regarding their definition, there is still not a widespread agreement (Takač, 2008). Therefore, miscellaneous definitions have been presented (e.g., Oxford, 1990; Macaro, 2001; Brown, 2007; Ellis, 1997a). O'Malley and Chamot (1990) define LLSs as specific procedures applied by the learner to improve comprehension, learning, and retention of information. Although as Alexander, Graham, and Harris (1998) convey that LLSs are arduous, time-consuming, and willful, Cohen (1998) emphasizes that they cannot be considered as good or bad; rather, they are essentially useful in second language learning. Presumably, one of the most popular definitions of LLSs is that suggested by Oxford (1990), i.e. "specific actions taken by the learner to make learning easier, faster, more enjoyable, more self-directed, more effective, and more transferable to new situations" (p. 8).

It is not surprising that most of the time LLSs are prerequisite for language learning and enhance communicative competence. Bandura (1997) and Zimmerman and Pons (1986) insist that frequent use of LLSs results in high self-efficacy, which is a sign of being an effective learner. Depending on the results of some studies about LLSs and proficiency, Oxford (1999) concluded that LLSs make a significant difference in language proficiency. However, for learners with limited proficiency, Nation and Webb (2011) propose applying specific strategies related to experience to make learners more independent.

One way to distinguish LLSs from other aspects of language learning is to identify and recognize their features. Some distinctive features were proposed by researchers in the field. However, acknowledging

characteristics of LLSs, like their definition, is fuzzy and paradoxical. Oxford (1990, p. 9) suggests that LLSs:

- contribute to the main goal, communicative competence.
- allow learners to become more self-directed.
- expand the role of teachers.
- are problem-oriented.
- are specific actions taken by the learner.
- involve many aspects of the learner, not just the cognitive.
- support learning both directly and indirectly.
- are not always observable.
- are often conscious.
- can be taught.
- are flexible.
- are influenced by a variety of factors.

Furthermore, categorizing LLSs is one of the most essential issues in the domain because such classifications are helpful for a better and deeper understanding of the nature of LLSs. However, in some classifications, individual items of subgroups overlap. In this regard, various taxonomies were designed. For instance, Rubin (1981), as one of the pioneers in the field of LLSs and whose first contributions dealt with researching good language learners, classifies LLSs into two groups, namely direct and indirect strategies. Strategies which directly affect learning are clarification, monitoring, memorization, guessing, deductive reasoning, and practicing while strategies that contribute indirectly are creating opportunities and production tricks. On the other hand, O'Malley and Chamot (1990) designed a taxonomy which was the basic instrument in many studies. The taxonomy is essentially the result of some studies carried out by the designers interviewed experts and novices on psychological tasks, theoretical analysis, and reading comprehension tasks. The taxonomy is classified into three categories, namely metacognitive, cognitive, and socio-affective strategies.

Later, Oxford (1990) introduced one of the most comprehensive taxonomies of LLSs. Very broadly, her taxonomy includes direct and indirect strategies. Direct strategies is subdivided into memory, cognitive, and compensation strategies while indirect strategies include metacognitive, affective, and social strategies. Oxford and Crookall (1989) define memory strategies as "techniques specifically tailored to help the learner store new information in memory and retrieve it later" (p. 404). Some strategies of this category create mental linkages such as grouping and associating or employing action such as using mechanical techniques, which play a key role in enhancing language skills. In addition, cognitive strategies, which relate to analyzing, synthesizing, and transforming available information, are fundamental in language learning (Ellis, 1997b). Compensation strategies are another group which, as Zhang and Li (2011) state, "allow learners to compensate for missing knowledge, such as by guessing" (p. 143).

Regarding metacognitive strategies, it was emphasized that most successful learners use this type of strategies through directing the reception and production of language and they affect language skills in different degrees (Ansarin, Zohrabi, & Zeynali, 2012; O'Malley & Chamot, 1990; Oxford, 2011). Affective strategies, then, are efforts undertaken by the learner to realize and overwhelm feelings (Bimmel, 1993). Therefore, affective strategies such as reducing anxiety by using music influence emotions and attitudes of the learner. The last group of strategies is social strategies, which facilitate the communication process. For learners who are in the process of second language learning, Mohan (2011) emphasizes that these strategies are crucial. Thus, social strategies such as "cooperating with peers", are critical in making the learning task easier.

Vocabulary, on the other hand, has been described as an indispensable building block of language learning (Schmitt, Schmitt, & Clapham, 2001; Schmitt, 2008; Zhang & Li, 2011) and it is critical for language learners to improve their language skills, which leads to effective communication (Amiryousefi, 2015; Zimmerman, 1998). In spite of these facts, vocabulary was ignored for many years and the main focus was on grammar due to the view that learners can get more from grammar than

vocabulary (Milton, 2009). Later, this perspective has been downplayed based on sociocultural needs and developments in linguistics (Richards & Rodgers, 2003). In this regard, Wilkins (1972) points to the significance of vocabulary saying "without grammar very little can be conveyed, without vocabulary nothing can be conveyed" (p. 111). Therefore, vocabulary knowledge can be identified as a fundamental aspect of language acquisition.

One of the distinctive features of vocabulary knowledge is that it is multifaceted in the sense that it comprises various aspects such as vocabulary size and depth. However, Vermeer (2001) emphasizes that there is no conceptual distinction between size and depth of vocabulary. VS, which is also called vocabulary breadth, is a quantitative term that refers to the number of words known by the learner (Marzban & Hadipour, 2012; Schmitt, 2014; Schoonen & Verhallen, 2008), and it comprises components such as form and meaning of a word. On the importance of VS, Meara (1996) states that learners with large VS are more proficient in different language skills than learners with smaller vocabularies. Moreover, the size of vocabulary guides teachers to select suitable teaching methods and leads them to focus on the type of vocabulary, which needs to be learnt (Nation & Webb, 2011; Schmitt, 2010).

It is worth mentioning that language learners use more strategies in learning vocabulary than in any other linguistic areas because, as Hamzah, Kafipour, and Abdullah (2009) and Schmitt (1997) mention, learners undoubtedly need strategies when they study words. For instance, in two studies by Ahmad (1989) and Lawson and Hogben (1996), students were presented with a range of L2 words to reveal which strategies they use to comprehend the words. In both studies, it was found that good vocabulary learners conducted many and various strategies to cope with the words than poor learners. In another study by Gu and Johnson (1996) who used both general proficiency and a VS measure to find out those strategies used by participants, it was concluded that some of the strategies related to vocabulary retention correlated significantly with VS, but not with general proficiency. The results of such studies led Fowle (2002) to claim that learners should use various strategies to discover meaning and other related aspects of unknown lexical items.

While learning English, Iraqi students spend many hours studying different fields of the language. They are supposed to be able to satisfy their English language needs. Nevertheless, most of these students are unable to take part in a simple conversation. Although the main areas of language such as vocabulary is primarily taught and intensive activities and efforts are allocated to develop learners' vocabulary knowledge, their progress is not as much as is anticipated and few of them can be considered successful learners. Thus, the current research is an attempt to inquire into the above-mentioned problems through seeking answers for the following research questions:

Question 1: How frequently do Iraqi EFL learners reportedly employ LLSs:

1a. as listed in the Strategy Inventory for Language Learning (SILL)?

1b. as reported during the interviews?

Question 2: Which sub-category strategy is most frequently used by Iraqi EFL learners with high and low VS?

Question 3: Is there a statistically significant relationship between language learning strategy use and high VS?

Question 4: Is there a statistically significant difference between Iraqi EFL learners with HVS and LVS based on their use of LLSs?

1. Methods and Materials

1.1 Participants

122 Iraqi sophomore, junior, and senior students, who were chosen through cluster sampling, participated in the quantitative phase of this study from a total population of 300 undergraduate students in the English Department of a state university in Iraq. Their ages ranged between 18 and 23 years with the exception of only 6 students who were aged over 23. Considering their gender, 60 of the students were female while the number of male students was 62. On the other hand, through administering

Stratified Purposeful Sampling, eight participants, who participated in the quantitative phase, were recruited according to their scores on the Vocabulary Levels Test (VLT) for the purpose of interviewing them about LLS use. Four students with large VS and four with small VS were chosen. Among the interviewees, five were female, while three of them were male.

1.2 Materials

For the current study, two quantitative instruments and a qualitative instrument were employed. In the first phase of the study, the Strategy Inventory for Language Learning (SILL) and Vocabulary Levels Test (VLT) were used, whereas in the second phase, semi-structured interviews were conducted based on a prepared guideline.

The SILL was originally created by Oxford (1990) and conducted in her study as a basic instrument to measure the frequency of strategy use. It has been used in many studies to investigate second and foreign language learners' use of learning strategies (e.g., Green & Oxford, 1995; Nisbet, Tindall, & Arroyo, 2005; Nyikos & Oxford, 1993; Park, 1997; Yang, 1999). The SILL is a 50 item scale. It is a self-scoring, paper-and-pencil survey, which includes statements such as "I read for pleasure" and "I look for people I can talk to in English", to which students are asked to respond on a five-point Likert scale, ranging from 1 (never or almost never true of me) to 5 (always or almost always true of me).

VLT, on the other hand, was originally designed by Nation (1983, 1990) as a diagnostic receptive vocabulary test to be used by English teachers. Later, it has been revised by Schmitt et al. (2001) to include three new forms. It measures learner's knowledge of words from a number of distinctive frequency levels. Meara (1996) called it as the "nearest thing we have to a standard test in vocabulary" (p. 38). It has also been claimed that the test still has the same distinctive feature (Beglar & Hunt, 1999), especially in the EFL settings, where exposure to English is either rare or nonexistent (Mizumoto & Takeuchi, 2009; Webb & Sasao, 2013). The test comprises of five sections: 2,000, 3,000, 5,000, and 10,000 frequency levels as well as an academic vocabulary section. The first four sections were sampled from Thorndike and Lorge (1944), Kučera and Francis (1967), and the General Service List (GSL) (West, 1953) while the academic section was sampled from the University Word List (Xue & Nation, 1984).

As it is recommended (e.g., Denzin, 1997; Dörnyei, 2007; Gao, 2004; Nunan, 2000; Schmitt, 2010), in order to amplify and triangulate the quantitative results, semi-structured interviews were conducted. A prepared guideline was used as a main instrument, although the students were free to express additional ideas about LLS use. It is worth mentioning that for the purpose of reliability and validity, the aforementioned quantitative instruments were piloted on 30 undergraduates. The analysis of the results indicated that the SILL was reliable with the Cronbach's Alpha value of .90 while the reliability value for the VLT was .92. Somehow surprisingly, the results of the VLT revealed that none of the participants reached the required score at 10,000 word level in order to determine that the level has been acquired. Therefore, for the main study the 10,000 word level was excluded. The answers and feedback of the interview questions also indicated that the questions and probes were clear, explicit, and adequate to provide rich responses.

1.3 Data Collection and Analysis

1.3.1 Data Collection

As we did in the piloting procedure, we took the necessary permission to conduct the study. As far as possible, the instruments were administered according to the procedures suggested by the designers of the SILL and VLT on the one hand and on the other hand according to the interview guideline. The instruments were marked with a two-digit number to match the two forms to be recognized during the analysis procedures. The instruments were conducted in different days within a week. The research purpose was explained and the participants were assured that their information would be kept confidential, and anonymity was taken into consideration.

Later, the SILL was administered, followed by the VLT. Finally, the semi-structured interviews were done with a group of eight participants. The students were very willing to participate and they were not rewarded materially in

any way for their consent to participate. During the interviews, the students were free to speak either in their native language or English in order to decrease the effect of anxiety and hesitation. The interviews continued for two hours and thirty minutes. In the middle of the interview, ten minutes were taken as a rest to refresh the interviewees. It is worth remembering that the instruments were conducted separately from the daily classes to reduce the potential influence of learning and during the interviews we ensured that every participant was heard and the discussion was kept on track. Very few questionnaires and test sheets had to be discarded because they were left unfinished. In all, 122 completed questionnaires and VLT papers were collected.

1.3.2 Data Analysis Procedures

Once collected, the data from the SILL and VLT were coded into SPSS 20.0 to be analyzed. In order to determine the reliability of both the SILL and the VLT, Cronbach's Alpha was used. Descriptive statistics was calculated to obtain average reported frequency of strategy use across all students plus the most and the least use of subcategory strategies. A Pearson product-moment correlation co-efficient was used to investigate whether there was a statistically significant relationship between HVS and LLS use. An independent-samples t-test was conducted to investigate whether there was a statistically significant difference between the learners with HVS and LVS based on the use of LLSs.

Lastly, after transcribing the interviews verbatim, a deductive procedure was applied to analyze the qualitative data. Deductive content analysis of the data involves using a previously constructed framework (Patton, 2002). In other words, it is a procedure which begins with a general perspective or theory and moves to the investigation of a particular circumstance in order to confirm or disconfirm the theory (Tracy, 2013). So, the data were analyzed depending on Oxford's taxonomy (1990) of LLSs. The predetermined categories were memory, cognitive, compensation, metacognitive, affective, and social strategies. That is to say, after scrutinizing the transcripts, each transcript was analyzed to identify the reported LLSs according to Oxford's taxonomy. The statements of the participants were organized into categories and each category was further categorized into sub-categories, such as reviewing well, practicing, and reasoning, and so on.

2. Results

2.1 Results of the Quantitative Phase

2.1.1 Reported Frequency of Language Learning Strategy Use

Before administering descriptive statistics to obtain results for the first research question, the alpha co-efficient for the reliability of the SILL across all students was calculated, which was .89. Later, descriptive statistics were calculated. The participants of the current study reported a mean frequency of strategy use for all SILL items of 3.2, ranging from 2.5 to 4.0. According to Oxford (1990), the average of 3.5 or above is regarded as highly frequent use of the strategy. Therefore, in this study 13 strategies were reported to be employed highly frequently by the learners. Among these strategies, the strategy "I pay attention when someone is speaking English" (Item 32) was the most frequently used strategy with an average of 4.0. On the contrary, the strategy "I use flashcards to remember new English words" (Item 6) was the least frequently used strategy with an average of 2.5.

The results also indicated that the use of the strategies by overall students stays within the scope of high frequency (3.5-5.0) and moderate use (2.5-3.4). So, according to the results, there was not low frequent use of any of the strategies (1.0-2.4). In addition, the overall mean reported frequency of strategy use was 3.2 as it is illustrated in the bottom of the table.

2.1.2 Reported Major Sub-category Strategy Use According to VS Level

The alpha co-efficient for the reliability of the second instrument, namely VLT, was .92. After scoring their responses in each level, the subjects were divided into two groups: learners with HVS and LVS. We considered 24 as the cut-off point for the acquired level as defined by Schmitt (cited in Xing & Fulcher, 2007). Therefore, in the present study only 11 participants obtained at least 24

correct answers in each of the four levels and considered as learners with HVS while the rest of the students (n=111) were not able to reach 24 points for each level. So, they were regarded as learners with LVS. It is worth mentioning that the average vocabulary test score for the students with HVS was 107.54 out of 130 possible points, with a range of 99 to 118. The participants with LVS obtained the average score of 65.92, with a range of 13 to 107. The average vocabulary test score across all students was 69.67 as illustrated in Table 1.

In order to find out the frequency of the sub-category strategies used by the learners with HVS and LVS, descriptive statistics were obtained (see Table 2).

The learners with HVS reported using metacognitive strategies with an average of 4.66, which was the highest frequent use for this group of learners while the learners with LVS reported an average of 3.5, which was also the highest level of frequency. Additionally, the students with HVS reported conducting social strategies with an average of 4.30, cognitive strategies 4.11, affective strategies 4.05, memory strategies 3.47, and compensation strategies 3.41. Likewise, it was revealed that the students with LVS reported using social strategies with an average of 3.19, affective strategies 3.11, cognitive strategies 3.08, compensation strategies 2.98, and memory strategies 2.86. The overall average reported frequency of sub-category strategy use for the students with HVS and LVS is also illustrated in Table 3.

VS Level	N	Mean	SD	Minimum	Maximum
HVS	11	107.54	5.46	99	118
LVS	111	65.92	23.06	13	107
Total	122	69.67	25.09	13	118

Table 1. Descriptive Statistics of the VLT Results

	HVS		LVS		Overall	
Sub-categories	Mean	SD	Mean	SD	Mean	SD
Memory	3.47	0.56	2.86	0.25	3.16	0.43
Cognitive	4.11	0.45	3.08	0.28	3.59	0.72
Compensation	3.41	0.56	2.98	0.23	3.19	0.30
Metacognitive	4.66*	0.25	3.50*	0.24	4.08*	0.82
Affective	4.05	0.51	3.11	0.40	3.58	0.66
Social	4.30	0.49	3.19	0.20	3.74	0.78

* most frequent use of sub-category strategy

Table 2. Average Reported Frequency of Sub-category Strategies with Standard Deviations

2.1.3 The Relationship between LLS use and HVS

As previously mentioned, only 11 students were able to acquire all four levels in the VLT (24 points or above in each level). The scores of the learners with large VS and their use of the LLSs are listed in (Table 3).

So, in order to find out whether there is a significant relationship between language learning strategy use and HVS, Pearson product-moment correlation co-efficient was computed.

The results (Table 4) indicated that there was a significant positive correlation between reported frequency of LLS use and HVS ($r=.96$, $p<.01$, $n=11$). That is, high frequent use of LLSs associates with HVS. In other words, when the learners deploy learning strategies frequently, the VS of the learners increases.

2.1.4 The Difference between the Learners with HVS and LVS based on their use of LLSs

As Lazaraton (2005) states "comparing various groups of people is the most common statistical procedure in

VS	LLSs
118*	4.28**
112	4.26
111	4.14
110	4.10
109	4.08
108	4.04
107	4.00
105	3.96
104	3.84
100	3.80
99	3.78

* highest score in VLT
** most frequent use of LLSs

Table 3. VLT Scores and LLS Use for the Learners with HVS

	LLS	HVS
LLS Pearson Correlation	1	.964**
Sig. (2-tailed)		.000
N	11	11
VS Pearson Correlation	.964**	1
Sig. (2-tailed)	.000	
N	11	11

** $p < .01$

Table 4. Relationship between LLSs and HVS

applied linguistic research" (p. 215), so an independent samples t-test was used to seek out whether there is any significant difference in reported frequency of LLS use between learners with HVS and LVS.

The results in Table 5 indicated that there was a statistically significant difference between the two groups (t=13.81, df=24.87, p<.05). In other words, there was a significant difference in scores for learners with HVS (M = 4.03, SD= .17) and learners with LVS (M = 3.12, SD = .42), t(24.87) = 13.81, p<.05, and the effect size was large (eta squared = .6). It is worth noting that the Levene's test was significant with a (p) value of .01, which means the variances were not equal. So, the assumption of homogeneity of variance was not met, and therefore the data results associated with the "Equal variances not assumed" row were considered which takes into account the Cochran and Cox (1957) adjustment for the standard error of the estimate and the Satterthwaite (1946) adjustment for the degrees of freedom. These results suggest that VS does have an effect on the use of LLSs. Specifically, the results suggest that when the learners have large size of vocabulary, they deploy LLSs more frequently.

2.2 Results of the Qualitative Phase

After analyzing the quantitative data, a deductive approach was used to analyze the qualitative data, which was gathered through administering semi-structured interviews. The data were analyzed based on Oxford's classification of LLSs in order to determine which types of strategies the participants use while learning English. During the analysis, quotations from participants' speech were provided to support the findings. It is worth mentioning that for the sake of confidentiality and anonymity, the letter (p) was used with numbers to represent the participants' names.

2.2.1 Reported Use of LLSs during the Interview

During the interview, five participants (P4, P1, P5, P7, and P8) reported using memory strategies. The participants make mental linkages to remember information. For example, P4 arranges words or concepts and makes a relation between them as he explained this by stating:

"Whenever I face difficulties of memorizing new words, I link the keyword with other words that relate to the keyword".

He also mentioned that the use of keywords is another strategy he conducts to memorize and remember vocabulary. Such strategies are fundamental, especially during writing and speaking. P1, on the other hand, addressed the use of visual imagery to link the new information with the previously memorized one.

"By employing imagery in a way that I imagine the new information and try to visualize it in my mind, I can remember such information better".

She also mentioned that visual imagery is more effective when accompanied by revision in a proper manner. For P5, memorizing information is more practical if the words or topics are divided into meaningful or related units or groups. So, she primarily follows such strategy as she stated:

"To me, dividing topics into groups is very useful such as words and expressions related to sport, weather, and holidays".

P7 employs the strategy of association when he memorizes a piece of information. He said:

"I usually make association between words in an alphabetical order. For example, when I want to memorize a word like 'nightingale', I link it to the word 'night' to make the process easier".

Using new words in a context is a strategy applied by P8 to retrieve the knowledge, as she explained:

"I use new words, phrases, and expressions by putting them in a sentence or using them in my speech while I am conversing with peers or other people".

Memory strategies are crucial because, by conducting them, new information can be transferred into the long term memory. However, during the interview there was no evidence for the use of some of the memory strategies,

	VS	N	Mean	SD	t	df	p
LLS	High	11	4.03	.17	13.81	24.87	.000
	Low	111	3.12	.42			

Table 5. t-test Results Comparing Learners with HVS and LVS on LLS Use

namely "representing sounds in memory", "physical response or sensation", and "using mechanical techniques".

Regarding cognitive strategies, six participants addressed the use of this category. P2 mentioned that he uses repetition as an effective strategy to learn new information and I would quote him stating that

"I always repeat new words many times either orally or graphically because I am sure this helps me learn new information and use it without mental thinking".

Additionally, he talked about the use of making summary whenever he does not have enough time to study. Similarly, P7 mentioned that, by using the strategy of skimming, he can learn new information without allocating a lot of time to the learning task. Furthermore, he showed his eagerness to learn new material through practicing. He put it into words by stating:

"I always look for chances to practice my language such as during lecture, writing essays or communicating with peers".

When asked about the best way to learn new information, P1 talked about analyzing and breaking down the expressions and phrases into smaller units to understand the meaning of the whole expression or concept. P1 and P3 also emphasized the use of highlighting important parts while reading, and writing down notes when they listen or read. P8 revealed that she relies too much on translating from Iraqi into English.

"When I want to practice my English, I try to translate the words and expressions that I want to utter".

Such a strategy indicates the difficulties of learning English for P8 because she mentally works on two processes; on one hand, she tries to understand the input, and on the other hand she wants to express her ideas. P4 conveys his impression to the use of formulas and patterns such as idioms and collocations to make his language more naturalistic.

"However, in my context, English learners do not pay much attention to idioms and collocations, I try to memorize a large range of such expressions and use them frequently".

Considering other cognitive strategies, namely "formally practicing with sound and writing system", "recombining", "using resources for receiving and sending messages", "reasoning deductively", "analyzing contrastively", and "transferring", there was no evidence for the use of them. Perhaps, this is because of the fact that the learners face the difficulties of finding the appropriate mechanisms to apply them as P1 explained:

"Regarding some of the strategies, we need help from experts and trainers to guide us about the best way and the good time for conducting them".

Such a grave point indicates the need of strategy training to direct learners about how to employ the strategies to learn easily and efficiently.

Considering compensation strategies, four students reported the use of such strategies. "Choosing the topic of conversation" was one of the strategies reported by the learners. In this regard, P8 explained the importance of conducting such a strategy in order to direct conversation in one's own interest. P8 confirms this by saying:

"Whenever I am involved in conversation with friends and other people, I try to direct the discussion in a way that I have sufficient knowledge about the topic, especially regarding vocabulary and grammar".

Similarly, P6 explained that she uses synonyms when she does not know the exact word while involved in learning tasks. Using synonyms and circumlocutions while engaging in learning tasks is important to help the learner to continue in practicing language without distraction.

For P1, making up new words during speaking and writing to keep herself in the process of learning is very effective. She demonstrated that she coins new words to express her ideas about the topic. She also revealed that she uses gestures or mimics to express the meaning, especially when she is unable to express the meaning by words as she said:

"I act out what I cannot say to manage the learning task".

In addition, P1 employs the strategy of "seeking for clues" during reading and listening. She showed her desire to guess from the context or situation. Such a strategy is vital, especially for adult learners, when they do not have

sufficient vocabulary. Finally, P3, like P1, emphasized the use of clues saying:

"Because for several years I have lived in France, I always seek for similar words between English and French, specifically when I do not know the meaning of English words…this strategy helped me many times".

P3 also reported the use of switching from the target language to the mother tongue to compensate for the lack of knowledge without feeling embarrassed.

The four participants rejected to avoid the communication either partially or totally and emphasized on taking part in conversations because it is good opportunity to practice their language. However, most of the participants were in agreement that the learners should heavily depend on themselves, P2 explained that he asks for help during engaging in hard tasks. As O'Malley, Chamot, Stewner-Manzanares, Russo, and Kűpper (1985a and 1985b) and O'Malley and Chamot (1990) validate it, if learners get help, they will improve at least in some aspects of their language learning.

Metacognitive strategies help learners to regulate language learning through planning, monitoring, and evaluating the learning process. All of the participants addressed the use of metacognitive strategies. For example, P2 reported the employment of two types of strategies, namely "specifying goals and objectives" and "evaluating the learning progress". He said:

"After selecting the linguistic skill like vocabulary or pronunciation, I will select the aims and objectives to reach the goal I have already planned for".

He further explained this by saying that he restricts himself to the goals to keep his learning on track and later evaluating his progress by making comparison between his previous language knowledge and recent capacity. P5 described her learning in the way that she restricts herself to focusing on one of the language skills rather than others for a particular time like working on writing or reading.

Regarding the strategy of "making a link between what has already been learnt and the new information", P3 mentioned that she connects the task which is in hand with the previous information as she said:

"In this way, I can learn the new material and remember previous information".

It seems that by conducting such strategy P3 utilizes both metacognitive and memory strategies. Likewise, P4 uses such strategy and he added that he also monitors his learning to diagnose the pitfalls and errors in order to adjust them.

Both organizing and concentrating on the learning task are prior strategies for P1. She said:

"I organize and schedule the learning task in a way that keeps my mind focused on the activity and avoid any distractions".

She said that she organizes the procedure according to priorities. P8 described how she encourages herself to improve her English skills. She said that she uses various tools to enhance her knowledge, such as watching movies, listening to podcasts, attending conferences, and reading for pleasure.

Moreover, P6 accentuates the focal role of conducting the strategy of planning. She illustrated that she identifies the learning task and then she determines the requirements of the task and takes advantage from anything that makes learning easier. Similarly, P7 confirmed the role of planning in learning English and he also talked about the way of practicing what he has achieved.

"I am used to standing in front of the mirror and talking to myself in English. Besides, I always seek for opportunities to practice my English".

During the interview, all participants showed their desire and positive attitude toward affective strategies and they ensured that they use such strategies. P2 mentioned that he always speaks with himself to facilitate the learning task.

"In my mind I create a picture that I can learn even if the task is difficult".

P3 described that she plays music whenever she is under pressure or feels anxious during learning. P4 demonstrated how he encourages himself by listening to

music and praying to feel relaxed.

Both P5 and P7 feel frustration while studying for exams. Furthermore, they hesitate when they want to take part in practicing English. They corroborate their feelings of frustration and hesitation by attempting to decrease such feelings through watching funny movies and reading jokes. P7 said:

"After feeling frustration, I immediately listen to jokes and start laughing to return to a good mood".

For P8, P6, and P1, affective strategies are significant. P1 conveyed that because she has a high degree of motivation, she participates in different discussions without feeling shy. P8, on the other hand, preferred to discuss her feelings with close friends to help her decrease negative feelings. P6 enjoys rewarding herself or taking valuable rewards from others, especially when she did a good performance in a particular task. Among affective strategies, there was no evidence for the use of two strategies: "listening to your body" and "using a checklist".

Six of the participants indicated great urgency of using social strategies. For instance, P6 and P2 pronounced the use of "asking for clarification" when they do not understand what the speaker said. P6 said:

"When I misunderstand or do not understand what the speaker says, I ask him/her to provide an example, particularly during lectures".

P1 and P2 also conduct the strategy of "cooperating with experts and English native speakers", especially through using social media as P1 clarified it:

"I allocate half an hour every night to practice my English with native speakers through Facebook and Skype".

By using social media, learners can be aware of people's culture and it is a good chance to improve vocabulary. P3 shows his desire to imitate native speakers to learn more about English language. On the other hand, P4 explained that he enjoys being corrected by others when involved with the target language.

"I feel comfortable when my mistakes are corrected by teachers or people around".

He assured that, by correcting his mistakes, he will learn more. Finally, P5 expressed his willingness to cooperate with peers regarding different activities such as writing essays or preparing presentations. The only social strategy which was not addressed by the participants was "developing cultural understanding". This might be due to the difficulty of reaching the culture of English people.

3. Discussion

The findings indicated that the participants of this study employed thirteen strategies highly frequently (see Table 1). Although the most frequent strategies emerged from four different sub-categories, most of the metacognitive strategies were among the most frequently used strategies (seven strategies out of nine). Such results have some elements in common with the results of Griffiths (2003) and Green and Oxford (1995) as the latter explain that such strategies "contribute significantly to the learning process of the more successful students although not being in themselves sufficient to move the less successful students to higher proficiency levels" (p. 289).

Due to lack of adequate opportunities for practicing English, as it is the case with almost every context in which English is learnt as a foreign language, one of the primary aims of English learners is to seek for chances to rehearse their knowledge. That is why, the learners in the current study and probably in all foreign contexts are looking for opportunities to engage in English language tasks. In this regard, English teachers can encourage students to take part in daily activities such as conversing about daily topics. Such a notion supports the theory of self-regulation as Dörnyei (2005) explains that learning tasks are clearly in the hands of the learners and McLaughlin (1978) emphasizes that in this way the learners can play an active role in their learning.

Moreover, the findings demonstrated that the learners conducted the strategies of four sub-categories with high frequency, somewhat surprisingly each of the memory and compensation strategies were out of this scope. This is probably one of the reasons that only eleven students had HVS. The best way to use the LLSs is to make learners aware of various strategies because, as Green and

Oxford (1995) explain, the power of strategies "derives from all its pieces and the way they are combined" (p. 292).

On the other hand, the students of both levels used the metacognitive sub-category strategies more frequently than other sub-groups (see Table 2). It was also not surprising to see that the learners with HVS deployed metacognitive strategies far more frequently than learners with LVS. Additionally, the learners with HVS conducted the strategies of four sub-categories, namely metacognitive, social, cognitive, and affective strategies highly frequently while learners with LVS reported the use of only metacognitive strategies with high frequency. Such results provide answers for some questions that could arise such as why most of the students in this research had small VS. Perhaps, it is so because the learners rely heavily on metacognitive strategies and somehow neglect other groups of strategies. That is to say, the learners should consider various strategies and more notably metacognitive strategies. Cohen (2011) stated that "good learners use a variety of strategies to accomplish what they accomplish, especially metacognitive ones" (p. 683).

As seen in Table 4, the results demonstrated that there was a strong positive correlation between LLSs and HVS. This finding is in agreement with many studies in both ESL and EFL contexts (e.g., Green & Oxford, 1995; Gu & Johnson, 1996; O'Malley & Chamot, 1990). This finding supports the view that more proficient learners use LLS more frequently. In other words, the use of LLSs frequently is fundamental in improving VS knowledge. Quite surprisingly, none of the learners had the sufficient knowledge of the 10,000 word level. Regarding VS, this finding can be considered pivotal and hence a pedagogical issue emerges. While both teacher and students engage in vocabulary tasks, the teacher needs to dedicate most of the time working on technical vocabulary. The importance of this type of vocabulary emerges from what Hazenberg and Hulstijn (1996) found; learners should acquire the vocabulary of this magnitude to encounter the challenges of university study in a second language.

Based on the use of LLSs, the results revealed that there was a statistically significant difference between the learners with HVS and LVS (see Table 5). As was supposed, the learners with large VS reported higher frequent use of various strategies than learners with small VS. This finding supports most previous findings (e.g., Abraham & Vann, 1987; Chamot & O'Malley, 1996; Nunan, 1991) and also advocates the notion suggested by Bandura (1997) and Zimmerman and Pons (1986) that students who deploy LLSs frequently receive a high level of self-efficacy, which is a strong prediction of being an effective learner.

The remarks and explanations of the interviewees revealed that the LLSs play a key role in learning English. During the interview, the students with HVS addressed the more regular use of various strategies in the right place at the right time in a harmonious manner. This finding is in parallel with the findings of Abraham and Vann (1987), Chamot and O'Malley (1996), and Ehrman, Leaver, and Oxford (2003) who convey that effective learners employ learning strategies in a harmonic and orchestrated manner while less effective learners use learning strategies almost aimlessly and randomly. Though the comments on the LLSs revealed that most of the students were to some extent aware of the basic role of the strategies, the learners mentioned that they have problems with the mechanisms of applying the strategies. Undoubtedly, the mechanisms of conducting particular strategies vary from one level of proficiency to another. In other words, while specific strategies are effective for learners who have small VS, they might not work for the learners who have large VS. This is a critical finding and indicates the need for strategy training.

Conclusion

This study chiefly aimed to seek out the relationship between language learning strategy use and VS among a selected group of Iraqi undergraduates. The results indicate that the average reported frequency of strategy use across all students is moderate, ranging from moderate to high. The learners with large and small VS report higher use of metacognitive strategies than other sub-groups. Additionally, a significant relationship is

discovered between reported frequency of language learning strategy use and HVS. Moreover, the deductive analysis of the qualitative data reveal that the participants use various types of strategies depending on their levels of VS, especially in the first level, namely direct and indirect strategies, and second level, i.e. memory, cognitive, compensation, metacognitive, affective, and social strategies. However, in the third level there is no evidence for the use of some strategies. It is also discovered that the learners address the use of wider range of indirect strategies.

Future Research

This research, to the best of our knowledge, is the first study to investigate LLSs and VS of Iraqi learners. It would be interesting to replicate the study with a larger sample. A longitudinal project might be carried out to investigate the extent to which the strategies are deployed over time and to examine the enhancement of VS. Finally, a study might be set up to include strategy training to enquire the effect of the training.

References

[1]. **Abraham, R., Vann, R. (1987).** Strategies of two language learners: A case study. In A. Wenden & J. Rubin (Eds.), *Learner Strategies: Implications for the Second Language Teacher and Researcher* (pp. 85-102). Prentice Hall, Englewood Cliffs, NJ.

[2]. **Ahmad, O. (1989).** Vocabulary learning strategies. In P. Meara (Ed.), *Beyond Words* (pp. 3-14). London: British Association for Applied Linguistics, and the Centre for Information on Language Teaching and Research.

[3]. **Alexander, P. A., Graham, S., & Harris, K. R. (1998).** A perspective on strategy research: Progress and prospects. *Educational Psychology Review,* 10(2), 129-154.

[4]. **Amiryousefi, M. (2015).** Iranian EFL learners' and teachers' beliefs about the usefulness of vocabulary learning strategies. *SAGE Open,* 5(2). http://dx.doi.org/10.1177/2158244015581382.

[5]. **Ansarin, A. A., Zohrabi, M., & Zeynali, S. (2012).** Language learning strategies and vocabulary size of Iranian EFL learners. *Theory and Practice in Language Studies,* 2(9), 1841-1842. http://dx.doi.org/10.4304/tpls.2.9.1841-1848

[6]. **Bandura, A. (1997).** *Self-efficacy: The Exercise of Control.* New York: Freeman.

[7]. **Beglar, D., & Hunt, A. (1999).** Revising and validating the 2000 word level and university word level vocabulary tests. *Language Testing,* 16(2), 131-162. http://dx.doi.org/10.1177/026553229901600202

[8]. **Bimmel, P. (1993).** Lernstrategien im Deutschunterricht. *Fremdsprache Deutsch*, 8(1), 4-11.

[9]. **Brown, H. (2007).** *Principles of Language Learning and Teaching* (5th Ed.). New York: Pearson Education.

[10]. **Chamot, A. U., O'Malley, J. M. (1996).** Implementing the cognitive academic language learning approach (CALLA). In: Oxford, R. (Ed.), *Language Learning Strategies Around the World: Cross-cultural Perspectives* (pp. 167-174). University of Hawaii Press, Manoa.

[11]. **Cochran, W. G., & Cox, G. M. (1957).** *Experimental Designs.* New York: John Wiley & Sons.

[12]. **Cohen, A. D. (1998).** *Strategies in Learning and using a Second Language.* New York: Longman.

[13]. **Cohen, A. D. (2011).** Second language learner strategies. In E. I. Hinkel (Ed.), *Handbook of Research in Second Language Teaching and Learning* (pp. 681- 683). New York: Routledge.

[14]. **Denzin, N. K. (1997).** Triangulation in educational research. In J. P. Keeves (Ed.), *Educational Research, Methodology and Measurement: An International Handbook* (pp. 318-22). Oxford: Pergamon.

[15]. **Dörnyei, Z. (2005).** *The Psychology of the Language Learner.* Mahwah, N.J.: L. Erlbaum.

[16]. **Dörnyei, Z. (2007).** *Research Methods in Applied Linguistics.* Oxford: Oxford University Press.

[17]. **Ehrman, M. E., Leaver, B. L., & Oxford, R. L. (2003).** A brief overview of individual differences in second language learning. *System,* 31(3), 313-330. http://dx.doi.org/10.1016/S0346-251X(03)00045-9

[18]. **Ellis, N. C. (1997a).** Vocabulary acquisition: Word structure, collocation, word-class, and meaning. In N. Schmitt (Ed.), *Vocabulary: Description, Acquisition, and*

Pedagogy. Cambridge: Cambridge University Press.

[19]. Ellis, R. (1997b). *Second Language Acquisition.* Oxford: Oxford University Press.

[20]. Fowle, C. (2002). Vocabulary notebooks: implementation and outcomes. *English Language Teaching Journal,* 56(4), 380-388.

[21]. Gao, X. (2004). A critical review of questionnaire use in learner strategy research. *Prospect,* 19(3), 3-14.

[22]. Green, J. M., & Oxford, R. (1995). A closer look at learning strategies, L2 proficiency, and gender. *TESOL Quarterly,* 29(2), 261-297. http://dx.doi.org/10.2307/3587625

[23]. Griffiths, C. (2003). *Language learning strategy use and proficiency: The relationship between patterns of reported language learning strategy (LLs) use by speakers of other languages (SOL) and proficiency with implications for the teaching/learning situation* (Doctoral Dissertation, University of Auckland).

[24]. Gu, Y., & Johnson, R. (1996). Vocabulary learning strategies and language learning outcomes. *Language Learning,* 4(4), 643-679.

[25]. Hamzah, M. S. G., Kafipour, R., & Abdullah, S. K. (2009). Vocabulary learning strategies of Iranian undergraduate EFL students and its relation to their vocabulary size. *European Journal of Social Sciences,* 11(1), 39-50.

[26]. Hazenberg, S., & Hulstijn, J. H. (1996). Defining a minimal receptive second language vocabulary for non-native university students: An empirical investigation. *Applied Linguistics,* 17(2), 145-163.

[27]. Kučera, H., & Francis, W. N. (1967). *Computational Analysis of Present-day American English.* Providence: Brown University Press.

[28]. Lawson, M. J., & Hogben, D. (1996). The vocabulary-learning strategies of foreign-language students. *Language Learning,* 46(1), 101-135.

[29]. Lazaraton, A. (2005). Quantitative research methods. In E. Hinkel (Ed.), *Handbook of Research in Second Language Teaching and Learning.* Mahwah, N.J.: Lawrence Erlbaum.

[30]. Macaro, E. (2001). *Learning Strategies in Foreign and Second Language Classrooms.* London: Continuum.

[31]. Marzban, A., & Hadipour, R. (2012). Depth versus breadth of vocabulary knowledge: Assessing their roles in Iranian intermediate EFL student's lexical inferencing success through reading. *Procedia-Social and Behavioral Sciences,* 46, 5296-5300. http://dx.doi.org/10.1016/j.sbspro.2012.06.426

[32]. McLaughlin, B. (1978). The Monitor model: some methodological considerations. *Language Learning,* 28, 309-332.

[33]. Meara, P. (1996). The dimensions of lexical competence. In G. Brown, K. Malmkjaer & J. Williams (Eds.), *Performance and Competence in Second Language Acquisition* (pp. 35-53). Cambridge: Cambridge University Press.

[34]. Milton, J. (2009). *Measuring Second Language Vocabulary Acquisition.* Bristol, UK: Multiligual Matters.

[35]. Mizumoto, A., & Takeuchi, O. (2009). Examining the effectiveness of explicit instruction of vocabulary learning strategies with Japanese EFL university students. *Language Teaching Research,* 13(4), 425-449. http://dx.doi.org/10.1177/1362168809341511

[36]. Mohan, B. (2011). Social practice and register: Language as a means of learning. In E. I. Hinkel (Ed.), *Handbook of Research in Second Language Teaching and Learning* (pp. 57). New York: Routledge.

[37]. Nation, I. S. P., & Webb, S. (2011). Content-based instruction and vocabulary learning. In E. I. Hinkel (Ed.), *Handbook of Research in Second Language Teaching and Learning* (p. 635). New York: Routledge.

[38]. Nation, I. S. P. (1990). *Teaching and Learning Vocabulary.* Boston, MA: Heinle and Heinle.

[39]. Nation, P. (1983). Testing and teaching vocabulary. *Guidelines,* 5(1), 12-25.

[40]. Nisbet, D. L., Tindall, E. R., & Arroyo, A. A. (2005). Language learning strategies and English proficiency of Chinese university students. Foreign Language Annals, 38(1), 100-107. http://dx.doi.org/10.1111/j.1944-9720.2005.tb02457.x

[41]. Nunan, D. (1991). *Language Teaching Methodology.* London: Prentice Hall.

[42]. Nunan, D. (2000). Seven hypotheses about language teaching and learning. *TESOL Matters,* 10(2), 1-9.

[43]. Nyikos, M., & Oxford, R. (1993). A factor analytic study of language-learning strategy use: Interpretations from information-processing theory and social psychology. *The Modern Language Journal,* 77(1), 11. http://dx.doi.org/10.2307/329553

[44]. O'Malley, J. M., Chamot, A. U., Stewner-Manzanares, G., Russo, R. P., & Kűpper, L. (1985a). Learning strategies used by beginning and intermediate ESL students. *Language Learning,* 35(1), 21-46. http://dx.doi.org/ 10.1111/j.1467-1770.1985.tb01013.x

[45]. O'Malley, J., & Chamot, A. (1990). *Learning Strategies in Second Language Acquisition.* Cambridge: Cambridge University Press.

[46]. O'Malley, M., Chamot, A., Stewner-Manzanares, G., Russo, R., & Kűpper, L. (1985b). Learning strategy applications with students of English as a second language. *TESOL Quarterly,* 19(3), 557-584.

[47]. Oxford, R. L. (1990). *Language Learning Strategies.* Boston: Heinle & Heinle.

[48]. Oxford, R. L. (1999). Relationships between second language learning strategies and language proficiency in the context of learning autonomy and self-efficacy. *Revista Canaria de Estudios Ingleses,* 38, 109-126.

[49]. Oxford, R., & Crookall, D. (1989). Research on language learning strategies: Methods, findings, and instructional issues. *The Modern Language Journal,* 73(4), 404-419. http://dx.doi.org/10.2307/326876

[50]. Oxford, R. L. (2011). *Teaching and Researching Language Learning Strategies.* London, England: Routledge.

[51]. Park, G. (1997). Language learning strategies and English proficiency in Korean university students. *Foreign Language Annals,* 30(2), 211-221. http://dx.doi.org/ 10.1111/j.1944-9720.1997.tb02343.x

[52]. Patton, M. Q. (2002). *Qualitative Research & Evaluation Methods* (3rd Ed.). Thousand Oaks, CA: Sage.

[53]. Richards, J. C., & Rodgers, T. S. (2003). *Approaches and Methods in Language Teaching* (2nd ed.). Cambridge: Cambridge University Press.

[54]. Rubin, J. (1981). Study of cognitive processes in second language learning. *Applied Linguistics,* 2(2), 117-131. http://dx.doi.org/10.1093/applin/2.2.117

[55]. Satterthwaite, F. E. (1946). An approximate distribution of estimates of variance components. *Biometrics Bulletin,* 2(6), 110-114.

[56]. Schmitt, N. (1997). Vocabulary learning strategies. In Schmitt, N. & McCarthy, M. (Eds.). *Vocabulary: Description, Acquisition and Pedagogy* (pp. 199-228). Cambridge: Cambridge University Press.

[57]. Schmitt, N. (2008). Review article: Instructed second language vocabulary learning. *Language Teaching Research,* 12(3), 329-363. http://dx.doi.org/ 10.1177/1362168808089921

[58]. Schmitt, N. (2010). *Researching Vocabulary.* Houndmills, Basingstoke, Hampshire: Palgrave Macmillan.

[59]. Schmitt, N. (2014). Size and depth of vocabulary knowledge: What the research shows. *Language Learning,* 64(4), 913-951. http://dx.doi.org/10.1111/ lang.12077

[60]. Schmitt, N., Schmitt, D., & Clapham, C. (2001). Developing and exploring the behaviour of two new versions of the Vocabulary Levels Test. *Language Testing,* 18(1), 55-88. http://dx.doi.org/10.1191/0265532016 68475857

[61]. Schoonen, R., & Verhallen, M. (2008). The assessment of deep word knowledge in young first and second language learners. *Language Testing,* 25(2), 211-236. http://dx.doi.org/10.1177/0265532207086782

[62]. Takač, V. P. (2008). *Vocabulary Learning Strategies and Foreign Language Acquisition.* Clevedon, UK: Multilingual Matters.

[63]. Thorndike, E. L., & Lorge, I. (1944). The Teacher's Word Book of 30,000 Words. *Teachers College,* Columbia University.

[64]. Tracy, S. J. (2013). *Qualitative Research Methods: Collecting Evidence, Crafting Analysis, Communicating Impact.* West Sussex: Wiley-Blackwell.

[65]. Vermeer, A. (2001). Breadth and depth of vocabulary in relation to L1/L2 acquisition and frequency of input. *Applied Psycholinguistics,* 22(2), 217-234. http://dx.doi.org/10.1017/s0142716401002041

[66]. Webb, S., & Sasao, Y. (2013). New directions in vocabulary testing. *RELC Journal,* 44(3), 263-277. http://dx.doi.org/10.1177/0033688213500582

[67]. West, M. (1953). *A General Service List of English Words.* London: Longmans, Green.

[68]. Wilkins, D. (1972). *Linguistics in Language Teaching.* Cambridge: MIT Press.

[69]. Xing, P., & Fulcher, G. (2007). Reliability assessment for two versions of Vocabulary Levels Tests. *System,* 35(2), 182-191. http://dx.doi.org/10.1016/j.system.2006.12.009

[70]. Xue, G., & Nation, P. (1984). A university word list. *Language Learning and Communication,* 3(2), 215-229.

[71]. Yang, N. D. (1999). The relationship between EFL learners' beliefs and learning strategy use. *System,* 27(4), 515-535. http://dx.doi.org/10.1016/s0346-251x(99)00048-2

[72]. Zhang, B. & Li, C. (2011). Classification of L2 vocabulary learning strategies: Evidence from exploratory and confirmatory factor analyses. *RELC Journal,* 42(2), 141-154. http://dx.doi.org/10.1177/0033688211405180

[73]. Zimmerman, B. J., & Pons, M. M. (1986). Development of a structured interview for assessing student use of self-regulated learning strategies. *American Educational Research Journal,* 23(4), 614-628.

[74]. Zimmerman, B. C. (1998). Historical trends in second language vocabulary instruction. In J. Coady & T. Huckin (Eds.), *Second Language Vocabulary Acquisition* (pp. 5-19). New York: Cambridge University.

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