Investigating the Interface Between Depth of Vocabulary Knowledge and EFL Learners' Strategy Use

[1]Zahra Rastegar Haghighi Shirazi and [2]Mortaza Yamini

[1]Department of Foreign Languages, Marvdasht Branch, Islamic Azad University, Marvdasht, Iran
[2]Department of Foreign Languages, Shiraz Branch, Islamic Azad University, Shiraz, Iran

Abstract: This study investigated the relationship between the depth of vocabulary and the vocabulary learning strategies (VLS) among Iranian undergraduate EFL learners. To such an end, the Schmitt's [1] Strategy Inventory and Read's [2] Word-Associates-Test (WAT) were distributed to 130 learners. The results of the study showed that while metacognitive, cognitive and determination strategies accounted for the depth of vocabulary learning among the Lexically Skilled Learners (henceforth LS), the Less Lexically Skilled Learners (hereafter LLS) were mainly reliant on their memory to answer the vocabulary items. This study can inspire teachers, learners and educators to attend more to the important role of strategies in escalating depth of vocabulary knowledge.

Key words: Depth of vocabulary knowledge · EFL learners' strategy use

INTRODUCTION

For so long, vocabulary was considered the Cinderella of language acquisition [3]. However, as stated by Wei [4] from the mid 1980s and especially much more noticeable in 1990s, scholars began to realize the important role of vocabulary learning in different areas of language acquisition and therefore it was afterwards regarded as one of the main "cornerstones" of language development for language learners [5].

Interestingly, others such as Meara [6] have gone even further by calling it 'the heart of communicative competence'. It is one of the language components which has direct impact on academic language achievements [7]. Lexical competence is especially needed for EFL/ESL learners. But what does it really mean to know a word?

Depth Vs. Breadth: Vocabulary knowledge is a multidimensional competence [8]. Most researchers agree on two major aspects of vocabulary knowledge: depth of knowledge and breadth of knowledge [9, 10]. Breadth of vocabulary knowledge refers to how many words a person knows at a particular level of competence [5]. However, depth refers to how well one knows a word. Therefore, it is a matter of quality than quantity [2, 10] and involves having different knowledge of the word's pronunciation, register, spelling, morphological and

syntactic features [9, 11]. "In sum, knowing a word involves more than being able to recall the meaning of a presented word form" [5].

Most research conducted on L2 vocabulary acquisition to date has been concerned with "estimates of vocabulary size or 'breadth' measures rather than the 'depth of vocabulary knowledge' of specific words or the degree of such knowledge [12, 13] and those very few cases investigating depth of vocabulary knowledge have been mainly concerned with the contribution of depth in escalating the learners' reading comprehension, though still this area, too, as Qian [36] claims has been seriously neglected.

Learning Strategies: Another important aspect of language acquisition which has for the past decades "created a paradigm shift in the realm of language learning and teaching is the language learning strategies." This has subsequently resulted in the researchers' putting "more premium on the learners and how they learn not so much on the teachers and how they teach" [14, 17].

There is no single agreed upon definition of strategy [15, 16]. Language learning strategies are the conscious steps or behaviors utilized by language learners to boost the acquisition, storage, retention, recall and employment of new information [17, 18]. They are the necessary tools for developing communicative competence [17, 19].

Corresponding Author: Zahra Rastegar Haghighi Shirazi, Department of Foreign Languages, Marvdasht Branch,
Islamic Azad University, Marvdasht, Iran.

Different classifications of strategies have been offered by various scholars. But the most comprehensive one belongs to Oxford [17] who developed a strategy inventory containing six categories: memory, social, cognitive, metacognitive, affective and compensation. *Memory strategies* help learners connect the new information to existing knowledge. *Social strategies* involve interacting with other people to enhance the language learning process. *Cognitive strategies* include repetition, word lists and flash cards. *Metacognitive strategies* deal with conscious planning, monitoring and predicting of the learning process by having an overview of it. They provide "input to the effectiveness of one's choice of learning strategies, providing positive reinforcement if progress is being made or a signal to switch strategies if it is not" [1]. *Affective strategies* help learners manage their emotions while learning the language and *Compensation strategies* exhibit the process of compensating for missing information.

Building on Oxford's, Schmitt [1] introduced another category called determination and excluded *compensation* and *affective* strategies. The *determination* strategies were added to account for the cases in which the definitions of new words are distinguished without resort to the knowledge of another person. These strategies are similar to "guessing intelligibly in listening and reading" part of Oxford's strategy inventory [1]. When learners face a new word for the first time, they can resort to these sorts of strategies, including the guessing the meaning of the word from the context, or resorting to their L1 and reference materials. On the whole, Schmitt's categorization of strategies incorporated two main dimensions: discovery of a new word's meaning and consolidating a word once it has been encountered. The first main category includes determination and social strategies which help the learners discover the newly faced words while consolidation strategies which comprise social, memory, cognitive and metacognitive strategies are used to retain their vocabulary knowledge.

But How Do Strategies Relate to Depth of Vocabulary Knowledge?: In the last years, few studies have focused on the relationship between depth and strategies. In his comprehensive study, Nassaji [20] investigated the relation between ESL students' depth of vocabulary and their lexical inference strategy use and success by the employment of certain types of strategies. The results revealed that "of a total of 51 successful inferences, 35 (68.6%) were made by LS readers and only 16 (31.4%) by the LLS readers. Of the total number of 111 unsuccessful

inferences, a great proportion (60.4%) was made by the LLS readers and only 39% by LS readers" (p. 393). In addition, it was proved that the more proficient learners made more efficient use of certain types of lexical inference strategies like section repeating, self-inquiry, verifying, monitoring and evaluative strategies. Besides, although the LLS group used the word analysis and word form analogy more than the LS, the means of success for the same strategies for the LS group outweighed the LS. In sum, depth of word knowledge contributed greatly to the learners' degree of strategy use. Farahani [21] and Xun & Sun [22] also conducted similar studies and reached much the same results. They all, therefore, support the approaches to lexical inferencing that emphasize the superiority of quality of vocabulary knowledge than the quantity and its critical role in guessing the meaning of unknown words.

Similar to breadth of vocabulary, depth of vocabulary is not a fixed stage and its different aspects change as a function of development. Gradually, one expands his knowledge of new meanings for the words they already know. In addition, categories of words change, too. For instance, as people grow and literally develop, they can distinguish more delicately among the words referring to cognitive status like knowing, believing, inferring [Booth & Hall, 1994; Nippold, 1998 as cited in Curtis, 23]. In addition, the level of abstractness employed to identify word relationship is transformed into a deeper level. For example, Anglin [1970 as cited in Curtis 23] conducted similar tests on children and adults giving both groups the same set of words and asking them to group them based on similarity in meaning. The results proved that the younger group sorted the words based on tangible, concrete relationships, while adults were more attracted to the abstract relationships among the words. Building on the above mentioned review, it is expected that as learners become more aware of strategies with greater proficiency, they show greater depth of lexical knowledge. The question addressed here is how do L2 learners' strategy use relate to their depth of knowledge?.

The Research Question of this Study Are:

- How does L2 learners' depth of vocabulary knowledge relate to degree and type of vocabulary learning strategy in higher and lower level proficiency learners?
- What are the most and the least frequently utilized categories of vocabulary learning strategies by senior lexically skilled and less skilled EFL students?

- Are there any meaningful differences in vocabulary strategy use between LS and LLS learners?

MATERIALS AND METHODS

Participants: The participants in this study were 130 senior students majoring in translation at Marvdasht Azad University. Ten, however, were excluded from the analysis due to incorporating too many missing answers in their answer sheets.

Instruments: Two types of instruments were utilized: a test of depth of vocabulary knowledge and a vocabulary learning strategy questionnaire.

Depth of Vocabulary Knowledge Test: Vocabulary tests are contingent upon the test designer's definition of lexical knowledge. Lexical knowledge, in turn, has been defined differently by different researchers" [24]. While Wesche and Paribakht [12] try to record the learner's improvement over a continuum of knowledge, Read [2] attempts to measure word associations [24].

To assess the learners' depth of vocabulary knowledge in the present study, the form B of the WAT developed by Read [2] was used. This test probes into learners' depth of vocabulary knowledge through word associations, that is, the knowledge concerning the different semantic and collocational relationships that exist between words is measured. Nassaji [26] maintains that the four related words in this test have been chosen to show three main categories of semantic relationship with the target word: "paradigmatic relationships (i.e., the word and its associate have similar meanings, such as *enable* and *allow*); syntagmatic relationships (i.e., the two words are collocates and co-occur in similar contexts, such as *income* and *tax*); and analytic relationships (i.e., the associate represents the meaning of part of the word, such as *team* and *together*)"(p. 391).

The reliability of this test as measured by Read [2] is 0.92. Moreover, as Qian and Schedl [8] claimed, the receptive aspect of the test taker's vocabulary knowledge measured in this test, is directly related to the kind of knowledge that is demanded in reading comprehension and therefore leads to the validity of the test in this sense. Each correct answer is given one point and there hence fore the total possible score is 200 for all the questions.

The Strategy Questionnaire: To gather data about learners' lexical strategies, the Schmitt's [1] questionnaire which comprised 58 questions and consisted of 5

categories of strategies (i.e., 1-9 determination strategies, 10-17 social, 18-44 memory, 45-53 cognitive and 54-58 metacognitive) was used. The reliability of the questionnaire as reported by Schmitt [1] was 0.81. It took at most 30 minutes to answer all the questions.

Procedure: In order to find out the probable relationship between the depth of vocabulary knowledge and vocabulary learning strategy, several different procedures were employed. Grouping the learners into two groups of LS and LLS was the fist step which was tallied on the basis of the learners' performance on the test of depth of vocabulary knowledge. The top 27% were regarded as the lexically skilled group and the bottom 27% comprised the less lexically skilled group. There were 30 students in the LS group and 29 in the LLS group.

Then the descriptive statistics for the depth of vocabulary knowledge and the total score on strategy were calculated. The descriptive statistics such as means and standard deviations were tallied to recognize the most and the least frequent strategy categories used and the frequency of their employment. In the next step, Pearson Product-Moment Correlations, some independent t-tests and multiple regression analysis were run to answer the research questions.

RESULTS AND DISCUSSION

The data gathered through the strategy questionnaire were analyzed in terms of the learners' total strategy use.

Table 1 summarizes the total mean score and standard deviation of strategy use of the participants. The results demonstrate that on the whole Iranian EFL learners are moderate strategy users (1). This is in agreement with the findings of 26, 27, 28, 29 in the context of Iran. Similar results were also found out in the Asian EFL context [Lee, 30 in Taiwan; Nagouchi, 31 in Japan; and Park, 32 in Korea].

As observed in Table 2, the lexically skilled learners used strategies to a greater extent. The mean of strategy use for LS group (3.38) is higher than that of the LLS's group (2.82). The more use of strategies by the participants of the current study was also supported by other studies [33, 34, 35, 36].

Close scrutiny of the data (Table 2) shows that the pattern of strategy use varied for the two groups. The most often used categories of strategies for the LS were metacognitive (mean=4.04; SD=.73) and cognitive strategies (mean=3.70; SD= .60) and the least were

Table 1: The descriptive statistics of the whole participants for different categories of strategies

	Determination	Social	Memory	Cognitive	Metacognitive
Mean	3.20	2.94	2.93	3.24	3.21
SD	0.54	0.70	0.54	0.82	1.09

Table 2: The descriptive statistics for the strategy use of the two groups

		Determination	Social	Memory	Cognitive	Metacognitive	Total mean of strategy categories
LLS	Mean	3.00	2.91	3.10	2.77	2.35	2.82
	SD	0.47	0.74	0.39	0.75	0.64	
LS	Mean	3.40	2.97	2.77	3.70	4.04	3.38
	SD	0.54	0.67	0.62	0.60	0.74	

Table 3: The independent t-test for the LS and the LLSs' performance on total strategy score

	M	SD	T value	df	P
LS	2.82	.66	-2.22	57	.030
LLS	3.38	.78			

memory strategies with a mean of (2.76) and SD of (.61). A finding consistent with the results of Abdollahzade [37] and Riazi & Rahimi [38]. It seems that the more lexically skilled learners are more cognizant of the important role of these manipulating strategies in enhancing the quality of learning. Similarly, Tahmassebi [39] and Zare-ee [40] discovered that Iranian learners use metacognitive strategies more than cognitive ones. Moreover, the findings of the present research show that this more proficient group relied less on their memory to answer vocabulary items. This indicates that these learners have reached a level to move beyond the basic act of memorizing the language elements [41] and consequently can engage in more manipulating and reasoning activities. Quite similarly, a study conducted on 418 university students in Taiwan by Lai [35] revealed that metacognitive and cognitive strategies were the most frequently used strategies deployed by the more proficient learners while memory strategies were the least frequently ones. However, contrary to the finding of the present research, they discovered that not only memory strategies but also social strategies were among the least frequently used categories.

The LS group, however, inclined toward memory strategies (mean=3.09; SD=.38), followed by determination strategies (mean=2.99; SD=.46) and their least used strategies were metacognitive ones (mean=2.35; SD=.63).

To check whether the total strategy use for the two groups truly varied, a t-test was run (Table 3).

The results showed that the above differences were significant. The 29 participants in the LLS group (M= 3.38, SD= .78) and the 30 participants in the LS group (M= 2.82, SD=.66) demonstrated a significant difference in performance t (57) =.03, eta squared = .08 as expected and the more skilled learners significantly used more strategies than their weaker counterparts, a finding consistent with Chen, 42; Griffiths, 43; Magogwe & Oliver 44; Park, 45; Yilmiz 37 and so many others.

Besides, a one-way MANOVA showed that the strategy deployment of the two groups varied significantly in terms of all strategy categories except the social one. In other words, a one-way MANOVA revealed a significant multivariate main effect for strategy categories, Wilks' λ = .36, F (5, 53) = 18.59, p =.000, partial eta squared = .63. Given the significance of the overall test, the univariate main effects were examined. Significant univariate main effects for all strategy types except social strategies F (1, 57) = .98, p >.05, partial eta square =.002 proved significant. Put differently, contrary to other categories of strategies, social categories did not show much improvement with proficiency. Perhaps this is because these skills have not been yet developed well in the Iranian academic context. This is mostly attributable to the entrance exam's wash back on students which leads learners to adopt a competitive approach than a collaborative one. In addition, students do not find so many chances of communicating with the native speakers. The final reason could be attributable to the formal educational system which does emphasize individualized performances rather than team work and cooperation.

To further find the relationship between the depth of vocabulary and strategy on the whole, a correlation was tallied. r (29) = .64, p < .01 and r(30) = .45, p < .05. Besides, to find out the effect of independent variables

Table 5: The multiple regression analysis for the effect of strategy categories on learners ' depth of knowledge

Level	Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
LLS	1	.700[a]	.490	.380	5.00632
LS	1	.754[b]	.568	.479	7.05200

Table 6: The partial regression analysis for the effect of different strategy categories on depth of vocabulary knowledge

	Independent Variables	Beta	t value	Sig.
LLS	(Constant)		9.137	.000
	Determination	.237	.992	.331
	Social	.050	.275	.786
	Memory	.461	2.292	.031
	Cognitive	.183	1.055	.302
	metacognitive	-.072	-.413	.684
LS	(Constant)	7.616	.000	
	Determination	.320	2.071	.049
	Social	.002	.012	.991
	Memory	.101	.661	.515
	Cognitive	.337	2.159	.041
	Metacognitive	.391	2.442	.022

(determination, social, memory, cognitive, metacognitive) on learners' depth of lexical knowledge, a multiple regression analysis was run. The results of Table (5) demonstrated a significant relationship between depth of knowledge and these variables ($p<.05$), with an R_index of .49 and .56 for the LLS and LS respectively, showing that in the less skilled group 49% of variation was accounted for by these strategy categories while in the LS 56%. However, to determine the degree to which each of these single variables predicted the depth, partial regression coefficients were calculated.

As indicated in Table 6, in the lower proficient group just one variable, memory, significantly predicted the quality of lexical knowledge. To be more specific, the total depth increased by .46 for every unit increase in memory strategy. The next highly frequently used strategy for this group was cognitive strategy which didn't prove to be significant. Concerning the LS group, however, a completely diverse result was observed. In this group, the strongest predictors of depth of knowledge were metacognitive, cognitive and determination strategies respectively, with metacognitive strategies explaining 39% of the variation, cognitive strategies 33%,and determination strategies 32% of the whole variation in depth. So a more flexible pattern of strategy use can be observed which as Chamot and El-Dinary [46] assert makes a difference between the successful and the less successful learners.

CONCLUSION

The current study aimed at investigating the contribution of strategies to the depth of vocabulary knowledge. The results showed that strategies correlated with depth of vocabulary knowledge. Therefore, the results from this research highlight the point that the types of strategies employed by learners greatly influence their depth of vocabulary knowledge. The higher proficiency learners deployed strategies which triggered greater depth of knowledge, while the less proficient group reported mainly relying on mnemonic devices. In other words, the high ability group tended to use metacognitive strategies most frequently which as Vandergrift [47] maintains makes the difference between successful and unsuccessful learners, followed by cognitive and determination, while the low level learners tended mainly to rely on memory strategies. In a similar vein, Goh and Foong, [48] discovered the over reliance of the more proficient group on cognitive strategies. The implication of these findings is that as learners increase their proficiency, they consciously notice the critical role of higher order executive skills like planning, monitoring, predicting and guessing the meaning of unfamiliar words. On the contrary, the low proficiency learners mostly resort to superficial rote learning, a finding consistent with Fewell [49], which will result in the knowledge lasting for a short period of time and lead to less depth of knowledge. The over reliance of learners on rote learning

can mainly be detected in the Iran's testing system which unduly demands short-term achievement rather than long term goals. Therefore, this necessitates a re-evaluation of testing methods which aim at evaluating the learners' reasoning abilities and analytic potentials as their priorities and consequently creates a tremendous change in the way learners view their learning materials and helps them shift their emphasis from utilizing memorization strategies to metacognitive and cognitive ones. Similarly, Fewell [49] maintains that "Dependency on rote learning may continue due to institutional constraints in emphasizing standardized testing. Educators should avoid encountering dependency on rote learning for its short-term effectiveness in test preparation" (p. 171).

Moreover, lower level L2 learners will most likely benefit from instruction that focuses on teaching strategies. Similar claims were also made by Jimenez, Garcia and Pearson [50], Kitajima [51], Kusiak [52], Song, [53]. Therefore, it seems that more deliberate attempts should be made to raise the learners' awareness and sensitization concerning the importance of metacognitive, cognitive and determination strategies in boosting their depth of vocabulary knowledge. This goal will be best achieved through strategies-based instruction whose underlying premise is promoting learner autonomy through a learner-centered method in which the students not only learn what they are supposed to learn, but also acquire the suitable ways of learning it [54, 55]. Similarly, yang [56] maintains that through brainstorming the strategies and discussing them in class and raising questions which center upon "the best methods to learn vocabulary", " the factors hindering vocabulary learning", "ways of improving vocabulary out of class" high level of vocabulary learning can be achieved. Teachers can also bring a check list to the class and encourage the learners to mark those that they employ. In this way, teachers can help learners plan and consciously monitor their learning [56].

In addition, teachers can make use of various activities to help students gain sufficient knowledge of the meaning of the words and their association. In this regard, Curtis [23] offers various activities such as semantic analysis, graphic representations of the relationships that exist among the various meanings of words, semantic mapping, semantic feature, concept anchoring, word sorts, raising the word consciousness and engaging learners in diverse reading activities.

Last but not least, due to the fact that vocabulary learning is a multidimensional activity, teachers should consciously try to incorporate various vocabulary teaching activities to cover all aspects of vocabulary knowledge. In other words, the two dimensions of vocabulary knowledge (breadth and depth) should be well treated in educational settings (Chui, 57).

Notes: 1 According to Oxford (1999), low strategy users have a mean of 2.5 and under, moderate strategy users a mean of 2.5-3.5 and high users incorporate a mean of more than 3.5.

REFERENCES

1. Schmitt, N., 1997. Vocabulary learning strategies. In Vocabulary: Description, Acquisition and Pedagogy Schmitt, N. and M. McCarthy, (eds)., Cambridge University Press, pp: 199-227.

2. Read, J., 1993. The development of a new measure of L2 vocabulary knowledge, J. Language Testing, 10: 355-371.

3. Harlech-Jones, B., 1983. ESL proficiency and a word frequency count, J. ELT J., 37(1): 62-70.

4. Wei, M., 2007. An examination of vocabulary learning of college-level learners of English in China, Asian EFL J., 9(2): 93-114.

5. Nation, I.S.P., 2001. Learning vocabulary in another language. Cambridge, UK: Cambridge University Press.

6. Meara, P., 1996. The dimensions of lexical competence. In Performance and competence in second language acquisition, Eds., G. Brown, K. Malmkjaer and J. Williams, Cambridge: Cambridge University Press, pp: 35-53.

7. Scarecella, R., 2002. Some key factors affecting English learners' development of advanced literacy. In Developing advanced literacy in first and second languages: Meaning with power, Eds., M.J. Schleppegrell and M.C. Colombi, Mahwah, NJ: Lawrence Erlbaum, pp: 209-226.

8. Qian, D.D. and M. Schedl, 2004. Evaluation of an in-depth vocabulary knowledge Measure for assessing reading performance, J. Language Testing, 21: 28-52.

9. Qian, D.D., 1999. Assessing the roles of depth and breadth of vocabulary knowledge in reading comprehension J. Canadian Modern Language Review, 56: 282-307.

10. Haastrup, K. and B. Henriksen, 2000. Vocabulary acquisition: Acquiring depth of knowledge through network building, J. International J. Appl. Linguistics, 10(2): 221-240.

11. Read, J., 2000. Assessing vocabulary. Cambridge: Cambridge University Press.

12. Wesche, M. and T.S. Paribakht, 1996. Assessing second language vocabulary knowledge: Depth versus breadth, Journal of Canadian Modern Language Review, 53: 13-40.

13. Qian, D.D., 1998. Depth of vocabulary knowledge: Assessing its role in adults' reading comprehension in English as a second language. Unpublished doctoral dissertation, University of Toronto.

14. Bernardo, A.S. and H.T. Gonzales, 2009. Vocabulary learning strategies of Filipino College students across five disciplines, J. TESOL J., 1: 17-27.

15. O'Malley, J.M. and A.U. Chamot, 1990. Learning strategies in second language acquisition. Cambridge: Cambridge University Press.

16. Rees-Miller, J., 1993. A critical appraisal of learner training: theoretical bases and teaching implications, J. TESOL Quarterly, 27: 679-681.

17. Oxford, R.L., 1990. Language learning strategies: What every teacher should know. New York: Newbury House.

18. Rigney, J.W., 1978. Learning strategies: A theoretical perspective. In Learning strategies, Ed., H.F. O'Neil, New York: Academic Press, pp:164-205.

19. Oxford, R. and M. Nyikos, 1989. Variables affecting choice of language learning strategies by university students, The Modern Language J., 73(3): 291-300.

20. Nassaji, H., 2004. The relationship between depth of vocabulary knowledge and L2 learners' lexical inferencing strategy use and success Canadian Modern Language Review, 61: 107-134.

21. Faraani, F., 2005-2006. The relationship between depth of vocabulary knowledge and EFL learners' lexical inferencing strategy use and success. Unpublished MA thesis, Shiraz Azad University, Iran.

22. Xun, Y. and L. Sun, 2006. L2 readers' depth of vocabulary knowledge and lexical inferencing strategy use. Foreign Language World, 4, Available online at: http:// en.cnki.com.cn/ Article_en/ CJFDTOTAL-WYJY200604006.htm.

23. Curtis, M.E., 2006. The role of vocabulary instruction in adult basic education. In Review of adult learning and literacy: Connecting research, policy and practice Comings, Eds., J. Garner, B. Smith and C. Mahwah, NJ: Lawrence Erlbaum Associates, pp: 43-69.

24. Laufer, B. and Z. Goldstein, 2004. Testing vocabulary knowledge: Size, strength and computer adaptiveness. Language Learning, 54(3): 399-436.

25. Paribakht, T.S. and M. Wesche, 1993. The relationship between reading comprehension and second language development in a comprehension-based ESL program. TESL Canada J., 11: 9-29.

26. Aliakbari, M. and A. Hayatzadeh, 2008. Variation of Language Strategies among Iranian English Students: The Effect of gender, International J. Pedagogies and Learning, 4(3): 72-87.

27. Hamzah, M.S.G., R. Kafipour and S.K. Abdullah, 2009. Vocabulary learning strategies of Iranian undergraduate EFL students and its relation to their vocabulary size, J. European J. Social Sci., 11: 1.

28. Mokhtari, A., 2007. Language learning strategies and beliefs about language learning. A study of university students of Persian in the United States. Unpublished doctoral dissertation, the University of Texas at Austin.

29. Rahimi, M., A. Riazi and S. Saif, 2008. An investigation into the factors affecting the use of language learning strategies by Persian EFL learners Canadian J. Appl. Linguistics,11(2): 31-60.

30. Lee, J., 2010. Learning strategies associated with gender differences and strategy choices: A study of Taiwanese students in English medium programs, MA thesis, Ming Chuan University.

31. Noguchi, C.T., 1991. Questionnaire for learners. Japan: Tottori University.

32. Park, S.H., 2005. Language learning strategies and their relationship to motivation and English proficiency among Korean EFL students, Unpublished PhD dissertation, university of Kansas.

33. Green, J.M. and R. Oxford, 1995. A closer look at learning strategies, L2 proficiency and gender, J. TESOL Quarterly, 29(2): 261-297.

34. Lai, Y.C., 2009. Language Learning Strategy Use and English Proficiency of University Freshmen in Taiwan J. TESOL Quarterly, 43(2): 255-280.

35. Oxford, R.L. and J. Burry-Stock, 1995. Assessing the use of language learning strategies worldwide with the ESL/EFL version of the strategy inventory for language earning (SILL) J. System, 23: 1-23.

36. Yilmaz, C., 2010. The relationship between language learning strategies, gender, proficiency and self-efficacy beliefs: a study of ELT learners in Turkey, J. Social and Behavioral Sci., 2(2): 682-687.

37. Abdollahzade, E., 2010. Undergraduate Iranian EFL learners' use of writing strategies, J. Writing and Pedagogy, 2(1): 65-90.

38. Riazi, A. and M. Rahimi, 2005. Iranian EFL learners' pattern of language learning strategy use, J. Asia TEFL, 2 (1):103-129.

39. Tahmasebi, A., 2006. Vocabulary learning strategies and the level of language proficiency. Unpublished MA thesis, Tehran: Tarbiat Modares University.

40. Zare-ee, A., 2008. The Relationship between Cognitive and Meta-cognitive Strategy Use and EFL Reading Achievement. Proceeding of the first regional conference on English language teaching and literature (ELTL-1) in affiliation with TELLSI, Faculty of Foreign Language and Literature of Islamic Azad University, Roudehen Branch, Tehran, Iran.

41. Hong-Nam, K. and A. Leavell, 2006. Language learning strategy use of ESL students in an intensive English learning context, J. System, 34(3): 399-415.

42. Chen, S.Q., 1990. A study of communication strategies in interlanguage production by Chinese EFL learners, J. Language Learning, 40: 155-187.

43. Griffiths, C., 2003. 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. Unpublished doctoral dissertation, Aukland University.

44. Magogwe, J.M. and R. Oliver, 2007. The relationship between language learning strategies, proficiency, age and self-efficacy beliefs: A study of language learners in Botswang, J. System, 35(3): 338-352.

45. Park, G., 1997. Language learning strategies and English proficiency in Korean university students, J. Foreign Language Annals, 30: 211-221.

46. Chamot, A.U. and P.B. El-Dinary, 1999. Children's learning strategies in language immersion classrooms, The Modern Language J., 83: 319-338.

47. Vandergrift, L., 1997. The comprehension strategies of second language (French) Listeners: A descriptive study. Foreign Language Annals, 30(3): 387-409.

48. Goh, C.C.M. and K.P. Foong, 1997. Chinese ESL students' learning strategies a look at frequency, proficiency and gender. Hong Kong J. Appl. Linguistics, 2: 39-53.

49. Fewell, N., 2010. Language learning strategies and English language proficiency: an investigation of Japanese EFL University Students. TESOL J., 2: 157-174.

50. Jimenez, R.T., G.E. Garcia and P.D. Pearson, 1995. Three children, two languages and strategic reading: Case studies in bilingual/monolingual reading. American Educational Research J., 32(1): 67-97.

51. Kitajima, R., 1997. Referential strategy training for second language reading comprehension of Japanese texts. Foreign Language Annals, 30(1): 94-97.

52. Kusiak, M., 2001. The effect of metacognitive strategy training on reading comprehension and metacognitive knowledge. EUROSLA Yearbook, 1: 225-274.

53. Song, M., 1998. Teaching reading strategies in an ongoing EFL university reading classroom. Asian J. English Language Teaching, 8: 41-54.

54. Cohen, A.D. and Z. Dörnyei, 2002. Focus on the language learner: Motivation, styles and strategies. In N. Schmitt, (Ed.), An Introduction to Applied Linguistics, London: Arnold.

55. Oxford, R.L., 2001. Language learning styles and strategies. In Teaching English as a second or foreign language, Ed., M. Celce-Murcia, Boston: Heinle and Heinle/Thompson International, pp: 359-366.

56. Yang, C., 2009. A Study of Metacognitive Strategies Employed by English Listeners in an EFL Setting in International J. Education Studies, 2(4): 134-139.

57. Chui, A.S.Y., 2006. A study of the English vocabulary knowledge of university in Hong Kong, Asian J. English Language Teaching, 16: 1-23.