The effects of using diverse vocabulary learning strategies on word mastery: a review paper

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Abstract - In accordance with the belief that language learning strategies are undeniably teachable, several researchers have attempted to expand the knowledge of language learners toward the productive use of learning strategies with the aim of empowering them to gain personal control of these strategies during learning process. The present investigation is an effort to inquire into the connection between using diverse vocabulary learning strategies and word mastery. Many studies have been done in this area. Therefore, some of these related papers were selected and carefully examined. The findings of the previous studies supported the fact that there is a significant and positive correlation between vocabulary knowledge and word learning strategies. The results suggested that training vocabulary learning strategies has positive effect on both language learning and language learners. Moreover, the instruction of strategy comes to the aid of teachers and learners to meet their needs.

Keywords: individual differences, language learning strategies, vocabulary development, word mastery

1. Introduction

Learning strategies are the key elements of language learning process. They provide evidence for the educators to take advantage of them in teaching at the highest levels (Schunk, 2003, 2009). Considering the research conducted on how to learn, the notions of learning styles and learning strategies became prominent. Based on Güven and Şimşek (2004), learning style contains the learning skills of the learners. Learning strategy involves the techniques employed in learning. Learning strategy changes in relation to tasks and social environment, but learning style is regarded as each person's predetermined feature.

Reid (1995) distinguished between language learning strategies and styles. He defined learning strategies as skills taught and used purposefully to make learning better. Language learning strategies are also described by Fewell (2010) as a practical and constructive factor in comparison to other influential factors for learning which influence the acquisition of the second language as they can be manipulated, controlled and run for improving language learning. Ellis (1994) argued that the taxonomy of language learning introduced by Oxford (2003) can be considered as the universal classification of learning strategies. There are six categories in this taxonomy namely social, compensatory, cognitive, metacognitive, memory, and affective strategies.

Brown (200) has explained the strategies in the character of particular approaches that vary in different time and situation to solve a specific issue. Oxford (2001) put emphasis on the special value of learning strategies in enhancing active participation of language learners in the process of language learning leading to achieving the ideal aim of language classes which is communicative competence. Wittrock (1996) conducted a study on learning strategies. He viewed these strategies as techniques that assist the learners to transfer the right words from short-term to long-term memory. Through these strategies learning is facilitated, students become inspired and new behaviors are formed. As claimed by Schunk and Zimmerman (2003), activities like selection and organization of knowledge, connecting old and new information, appropriateness and evaluation of learning materials are stimulated by learning strategies.

One of the most essential requirements for academic progress is vocabulary acquisition. Students need substantial word knowledge to be successful in primary skills and to learn content materials. Thereupon, students' long-term pedagogic success is greatly influenced by minor differences in vocabulary knowledge. The rate of vocabulary growth is affected by biological and environmental indicators. Language deficiency and memory shortage are related to biological features. The strong association between vocabulary knowledge and socioeconomic status also show that home characteristics cause distinctness in vocabulary knowledge of language learners.

As Baumann and Kameenui (1991) announced, Becker (1977) was one of the pioneers who stressed the significance of vocabulary expansion. Becker (1977) made a connection between academic attainment and vocabulary size of deprived learners. In line with Becker (1977), Stanovich (1986) suggested school failure model focused on interconnected development of vocabulary growth, reading acquisition and phonological awareness. In addition, Liberman and Liberman (1990) and Stanovich (1986) believed that to be a skillful reader the phonological awareness should be trained to the students. As a matter of fact, those students who start school behind typical fellows can acquire reading skills more quickly like peers who are in the most

advantageous pedagogical circumstances (Carnine, Silbert, and Kameenui, 1990).

Another area of inquiry is related to examining the critical factors closely correlated to individual differences in vocabulary acquisition. Similar to language learning, individual differences have a noticeable place in many fields of study. On the report of Brown (2000), Ehrman, Leaver, and Oxford (2003), Oxford (2002) and Peacock (2001), learning strategies and styles are the most studied and inspected factors among the other learner differences in the literature of language learning. Additionally, language learning strategies and styles are considered as the main elements of shaping the quality of learning in foreign and second language learners.

Individual differences can also be spelled out regarding poor and rich vocabularies. Fawcett and Nicolson (1991) shed light on the use of ineffective strategies for memorizing the meaning of words among learners who had poor vocabularies. These researchers conducted an investigation to see the result of teaching 24 difficult words to two groups of adult people with reading disabilities, poor and rich vocabularies. They found that adults with rich vocabularies were able to acquire more meanings than adults with poor vocabularies. The authors claimed that this finding is due to semantic richness which is the correlation among words and their meanings. Although many studies have focused on the examination of the relationship between the use of diverse vocabulary learning strategies and vocabulary mastery, there is not a rich body of information to predict the direct connection of vocabulary proficiency and learning strategies. Thereupon, it is needed to assess this relation. The purpose of this study is to review the extent to which these two concepts are related.

2. Vocabulary

Considering the relation that Becker (1997) observed between academic success and vocabulary knowledge, many investigations have been conducted. In addition to Becker's (1977) observation, three other reasons can be pointed out for remarkable notice to vocabulary development area. First, the close association of reading and vocabulary acquisition may lead to decrease in literacy level (Adams, 1990). Second, as maintained by Beck and McKeown (1991), moving to information-processing direction in psychology brought about a theory for developing the relationship between the notions and words. It demonstrated that learning is a level higher than assembling facts about word definition. Third, in the light of the study done by Beck and McKeown (1991), education changed direction from basic skills to analytic skills. Such a shift provided additional information for vocabulary acquisition and understanding of language in the context of constructivist education and preliminary knowledge.

Carey (1978) carried out a research on vocabulary knowledge. He made a distinction between fast and extended mapping. A superficial meaning of a word is learnt by the learner in fast mapping. It means that more than 1,600 words are available at different levels of mapping. Consequently, if an individual learns only eight new words meaning each day, this kind of learning occurs in basic level of understanding. Learners gain these two mappings at the same time. By extended mapping Carey (1978) meant that when learners have frequent use of a word, they will be able to remember it faster because it becomes an active vocabulary.

Nagy and Anderson (1984) tried to get to the bottom of the number of printed words in classroom materials such as novels, textbooks, encyclopedias, work books and magazines in grades 3 through 9. These researchers introduced 88,533 word families that almost all school students were familiarized with and they used them as criteria

followed the tradition of Nagy and Anderson (1984). Walker and Poteet (1989) made inquiries about the link between word processing, learning and evaluation conditions and learners' ability in recall tasks. They experimented pupils of fourth and fifth grades and presented the words in one of learning or evaluation conditions. They placed a target word in one statement and a rhyme pair in another statement. The results depicted that learners could recall the words when the target word matched the rhyme. The investigators concluded that adding semantic information can aid in recall task.

Recent studies on vocabulary have highlighted vocabulary differences among learners. For instance, White et al. (1990) compared students of two low socioeconomic status schools and one middle socioeconomic status school (grade 1 through 4) in terms of growth differences and reading vocabulary size. Reading vocabulary size was measured by the number of decoded printed words. Even among students of middle socioeconomic status school, differences in reading vocabulary size were apparent in comparison to students of low socioeconomic status schools. Total number of decoded words was 4,800 for middle socioeconomic status students and 2,500 for low socioeconomic status students out of 19,050 words. These differences showed that the number of decoded words may go beyond 3,000 words per year (e.g., Baumann and Kameenui, 1991; Beck and McKeown, 1991; Graves, 1986). The findings of White et al. (1990) research indicated that time will worsen the vocabulary problems of students starting school with poor vocabularies. In middle and low socioeconomic status schools the vocabulary difference at grade 1 was about 1,300 and 2,300 words in particular. But this difference at grade 3 reached 5,000 words for both middle and low socioeconomic status students.

2.1 Vocabulary Development

Vocabulary knowledge plays an integral role in language proficiency, production and comprehension of a text. In the opinion of Teng (2014), learners' understanding of what they read and hear is heavily dependent on vocabulary knowledge. Breadth and depth are two components of this area of learning. Breadth of vocabulary knowledge is consisted of quantity and size of words that every learner is familiar with (Nation, 2007). Depth of vocabulary knowledge refers to quality of words, it means having a deeper understanding of words by learning other aspects of it like morphology, syntax, pronunciation and register.

In a qualitative study, Diaz (2015) examined the effects of metacognitive strategies on vocabulary improvement. He selected beginning younger learners as participants. By metacognitive strategy training he raised the awareness of learners about learning strategies. According to an instructional model, a series of five interventions were included. Learners acquired some metacognitive strategies like evaluation and planning through these interventions. The findings revealed that instruction of metacognitive strategies positively leads to vocabulary development, skill acquisition and higher degree of individuals' consciousness of vocabulary learning strategies.

In an experimental study conducted by Naeimi (2015), vocabulary acquisition was studied through direct and indirect learning strategies. It was an effort to evaluate 60 pre-intermediate learners. A pretest was employed to classify learners in A and B groups based on their vocabulary knowledge. Before the administration of the two vocabulary tests, a pilot study estimated the reliability and equality of the tests. The

instruction of group A accompanied with direct strategies such as reviewing, but for group B an indirect one like expressing the feelings was chosen. Results of posttest demonstrated that participants of group A could achieve higher scores and perform better than group B in tests of vocabulary skill. The investigators concluded that easy and effective direct learning strategies can greatly improve vocabulary achievement.

A comparative study in the context of Quetta, Pakistan was carried out by Fatima and Pathan (2015) on the relationship between learning strategies and vocabulary development. A group of 180 undergraduate students were randomly selected from women's university of Sardar Bahadur Khan and Balochistan University. The instrument of this study was a questionnaire designed by Gu and Johnson (1996) on activation, cognitive, metacognitive and memory strategies. SPSS and t. test were run to analyze the data. Participants used bilingual dictionaries and knowledge of parts of speech to learn new English words. The obtained results supported the fact that cognitive strategies were the most widely used strategies in mastering new words and there was no difference in strategies of vocabulary practice between the undergraduate students of two universities.

2.2 Individual Differences in Vocabulary Development

In literature it was pointed out that individual differences are complex topics to be tested and further research would be of the great need (Ehrman et al., 2003). As noted by Ellis (1994), individual differences in second language learning should be explained by learning strategies and the strategies are affected by individual differences and biases. The individual differences in vocabulary acquisition contain memory problems, linguistic differences and strategies of students with poor vocabularies. Linguistic deficiencies are rooted in four models of vocabulary acquisition namely deficit model, speed of verbal information processing, word decoding model and abstraction model.

Linguistic problems resulted from incorrect and imperfect usage of systematic language structures (Stahl and Erickson, 1986). According to Stahl and Erickson (1986), the problem of poor vocabularies can be solved by teachers through supplying context clues to get the meaning of new and difficult words before reading a text. Boucher (1986) stated that students with poor vocabularies need to acquire the meaning of words and to be able to use them regularly. Semantic memory deficit causes difficulties in memory of people who are learning the meaning of words (Swanson, 1986). The difficulty shows the weak connection between semantic, phoneme, and orthography or the disorganized information in semantic memory. Swanson (1986) concluded that learners with disabilities remember small number of words as compared to learners without disabilities.

Mizumoto and Takeuchi (2009) in the study of effects of strategy instruction on language use regarding individual differences claimed that considering individual differences, no strategy can be the best since differences change type of strategies used by different individuals. Thus, the task of teacher is to guide learners in selecting simple or complicated strategies in the class environment. In EFL contexts, these strategies can also be applied out of the class. The participants of this study were Chinese college EFL learners. The findings as specified by the investigator had limitation in generalization. They could not be generalized to various age groups and settings.

An investigation was conducted by Ghost Bear (2012) on the link between learning, technology and individual differences. In this study the researcher examined

the learning strategies used by adults to be involved in an auction process. An online questionnaire was utilized. The number of adult people responded this questionnaire was 380. At the end of study, the participants reported that learning process was the result of continuous activities they took part and believed that eBay activities provide opportunities for a meaningful learning process not just an electronic business. The findings indicated that learning process refined learning principles of adults and it is possible to attain same learning functions by means of diverse learning strategies. Another finding of this study supported the role of internet use in increasing computer and traditional literacy.

In another study, factors influencing the experiences of individuals about second language learning were explored. Anjum, Al-Othmany and Hussain (2015) tried to generalize individual differences to second language learning. A questionnaire and a written form were employed to determine the effect of social, motivational and demographic factors on second language acquisition. Four participants were involved in this study. Two of them answered the questions with fairly short responses and the rest answered completely. The results revealed that society and occupation could have positive and negative effect on learning a second language. In some occasions they support and sometimes they hinder learning process. Intercultural communication also played an indispensable part in stimulating this action.

The male and female differences in using various learning strategies have been investigated by Sherafat, Kabiri and Soori (2015). Thirty EFL male students and 30 EFL female students of Islamic Azad University of Larestan were examined in terms of using language learning strategies. Selection of participants was based on an Oxford Placement Test. Through a three-point scale questionnaire proposed by Bozinovic and Sindik (2011), the investigators collected data on some demographic features like race, gender, level of proficiency and age. The results of the study confirmed the hypothesis of using diverse learning strategies by males and females. To conclude, it could be said that female EFL students used all learning strategies more frequently than EFL male students.

Kubat (2018) in a qualitative study determined the individual differences exist among students during two processes of learning and teaching. Kubat (2018) focused on some individual differences like perception, intelligence, physical and mental attributes that shouldn't be neglected by language teachers. Four of fourteen science teachers were randomly selected to be interviewed. The findings showed that half of science teachers highlighted the importance of individual differences in regulating learning styles and half of them declared that teaching and learning activities like tests and homework help learners to identify their differences.

3. Learning Strategies

Learning strategies have astonished many investigators in recent years. Different ways of doing learning activities by individuals led to the emergence of two notions of learning styles and learning strategies. Learning styles are intrinsic features that learners are greatly dependent on them (Fellenz and Conti, 1986). In comparison to learning styles, learning strategies are the methods used when a learner starts learning to achieve a specific goal (Fellenz and Conti, 1986).

On the analysis of deep and surface strategies, Scouller (1998) looked into the effects of assessment methods on learning strategies in the context of Sydney. Based

on the research on learning, both surface (rehearsal) and deep (elaboration) strategies are used by language learners (Biggs, 1979; Pintrich, Smith, Garcia, and Mckeachie, 1993). A sample of 206 second year students were studied to see the impact of assessment on learning strategies. The findings of this study showed that learners were more willing to use deep strategies in essay exams and surface strategies for multiple-choice questions. Therefore, assessment tasks persuaded learners to center around meaning, understanding, organization and elaboration in place of rehearsal.

Struyven, Dochy and Jassens (2002) put emphasis upon the relationship between assessment perception and learning strategies. Participants took part in a course of International Business Strategy. One group of 406 students utilized assignment-based form and a group of 312 students used problem-based pattern. Results demonstrated that learners who wanted to employ surface strategy were able to recognize just surface requests while those discerning authentic methods were probable to engage in deep language learning strategies. In the context of New Zealand, a study was carried out on the connection between using language strategies and course level (Griffiths, 2003; Politzer, 1983; Ghrib, 2004). The participants comprised of 130 Tunisian students studying in a guidance school. Two researcher-made questionnaires were developed for this study. The obtained results revealed that there was a positive linear relationship between course level and strategy usage. Course level is also crucial in choice of learning strategies.

In a study done by Ş. ŞEN, A. YILMAZ, H. YURDUGÜL (2012) the relationship between learning strategies, epistemology, beliefs and motivation was evaluated. The research was conducted with the participation of 446 undergraduate students. MSLQ (Motivated Strategies for Learning Questionnaire) and Epistemology Belief Scale were utilized to analyze data through confirmatory factor and path analysis. Via path analysis, it was found that motivation regulates the relation between beliefs and learning strategies. Learning strategy is influenced directly by belief and indirectly through motivation.

In an experimental study, Bilen, Tavil (2015) examined the influence of cooperative learning strategies on vocabulary knowledge. The sample consisted of 96 fourth grade pupils. All members of control and experimental groups took a pretest and a posttest. In their diaries the students reported on their assumption of cooperative learning. Mann- Whitney U test and Wilcoxon Signed Rank test analyzed the score differences in pretest and posttest. The results offered significant insights on the positive attitudes of group members about cooperative learning strategies leading to higher scores.

Abbasian and Hartoonian (2016) conducted an investigation on how self-regulated strategies can improve learning proficiency. For this study, 115 Iranian EFL learners were invited to participate. They were MA and BA students studying TEFL ranging in age from 20 to 30. In order to evaluate the reading comprehension and proficiency a test of TOEFL was administered. They were also given a questionnaire proposed by Al Asmari and Ismail (2012). Pearson correlation was run to calculate data. The results from this study indicated a significant relation of language capability, learning strategies and reading comprehension.

A cross-cultural study was conducted by Köksal, Gökhan Ulum (2016) on Arabic and Turkish language learning strategies. Data were gathered from 251 middle school students with different cultural and linguistic backgrounds. The instrument of the study was a strategy inventory to analyze cultural and linguistic differences. The

obtained results indicated that Arabic and Turkish students were similar in using strategies in a number of ways. The only difference was in using dictionaries while doing reading activities. Arabic students did not like to use it but Turkish students preferred to use a dictionary to help them.

An investigation was done by Alkharusi (2018) to explore the connection between motivational orientation, perception of assessment and learning strategies. The aim of study was to correlate assessment task to motivational issues and learning strategies. English was selected because it is the basic requirement for education. The participants were 198 Omani pupils (tenth grade) studied in English classes through canonical analysis. Results suggested that self-efficacy and authenticity of assessment were positively correlated.

3.1 Vocabulary Learning Strategies

Vocabulary is one of the main aspects of language acquisition. Vocabulary learning strategies (VLS) have received specific attention of many researchers during the last two decades. As noted by Siriwan (2007), vocabulary learning refers to learning a word package and acquiring some techniques or strategies to decode unknown words. On the whole, individuals often utilize learning strategies in the way of acquiring new vocabularies rather than other learning activities (o'Malley, Chamot, Stewner, Manzanares, Kupper, and Russp, 1985).

Wei (2007) in the context of China conducted a study on 60 tertiary-level leaners. The frequency rate of vocabulary strategies was examined using Likert Scale. Beliefs and English vocabulary proficiency were linked to vocabulary learning strategies. Results showed that those majoring in English utilize the strategies more often than non-English fields. In the same line, Barcroft's investigation (2009) sought to discover strategies of intentional vocabulary learning. He attempted to correlate learning proficiency and perceived strategies. A posttest and a questionnaire on vocabulary recall were administered to English spoken learners of Spanish. The findings revealed a positive connection between recalling the target words and strategy usage. Vocabulary learning strategies were the basic part of learning program of proficient learners.

The relationship between vocabulary learning strategies and vocabulary proficiency in a longitudinal study was scrutinized by Gu (2010). Two active and passive tests followed by a questionnaire were completed by 100 Chinese EFL students. Based on the findings of this study, learners who were more successful in answering passive questions used various types of vocabulary learning strategies. There was a negative relationship between active vocabularies and vocabulary strategies.

In Iran context an investigation was made by Khatib, Hassanzadeh and Rezaei (2011) on vocabulary learning strategies used by upper-intermediate English learners. The population of 146 EFL learners took a TOEFL test at Vali-e-Asr university of Rafsanjan. Students who scored 480 and above were given a VOLSI (Vocabulary Learning Strategy Inventory) questionnaire to select the strategies they preferred most. According to Lawson and Hogben (1996), context was highly important in vocabulary acquisition for creating and acquiring the meaning of unfamiliar words. The results of t. test and multiple regression manifested no contrast between selection of vocabulary learning strategies and individual's gender.

Rahimy and Shams (2012) attempted to explore the association of vocabulary

learning strategies effectiveness with EFL scores of vocabulary tests. Among 15 classes of Kish institute, 50 intermediate learners participated in the study. For research aims, OPT (Oxford Placement Test), a 20 multiple-choice item vocabulary test and a 30-item questionnaire were employed to introduce the ways of learning new vocabulary. For data analysis, SPSS and descriptive analysis were applied. The results demonstrated the positive impact of vocabulary learning strategies on performance of learners during vocabulary test. Determination, memory and cognitive strategies were used most often.

Connection of self-efficacy beliefs of EFL learners and vocabulary learning strategy usage was meticulously examined in literature (Heidari, Izadi, Vahed Ahmadian, 2012). From Sistan and Baluchestan University, 50 junior translation students were selected. The researcher employed a self-efficacy beliefs questionnaire (adopted from Nezami, Schwarzer and Jerusalem, 1996) and a vocabulary questionnaire (constructed by Lip, 2009). Results of study indicated that self-efficacy and vocabulary learning strategy usage are positively correlated.

Seddigh and Shokrpur (2012) attempted to investigate how 120 male and female medical students of Shiraz used vocabulary learning strategies. A questionnaire was used to explore the useful kinds of vocabulary strategies and dissimilarities in vocabulary learning strategy usage with regard to gender. The results of ANOVA provided the fact that the use of dictionary and guessing were high among medical students to acquire vocabulary. The mean scores were significantly different. Females liked to use guessing strategy but males preferred dictionary strategy.

Numerous studies focused on vocabulary learning strategies among undergraduate EFL learners (Zokaee, Zaferanieh and Naseri, 2012). A sample of 54 learners studying at university of Tarbiat Moallem took part in this study. These learners were aged between 20 to 22. TOEFL test and vocabulary learning strategies questionnaire of Schmitt (1997) were used at the outset of study. Through descriptive and inferential analyses, it was found that the perceptual style of the learners has a positive effect on vocabulary learning strategies. Visual style was employed more than other learning styles and the least frequent one was group style. No difference was revealed between preferences of vocabulary strategy and learning styles of males and females.

Lai (2013) tried to get to the bottom of instruction of vocabulary learning strategies to EFL classrooms. The explicit learning strategy was applied to 180 EFL freshmen in Taiwan university. The perceptions, beliefs and ideas of the sample were considered before and after the explicit vocabulary learning strategy instruction. The comprehensive Schmitt's taxonomy of vocabulary learning strategies was utilized in this study. Most of the participants' reports stressed the usefulness of strategy training and its effect on usage of diverse vocabulary learning strategies.

An attempt was made by Ismaiel and Al Asmari (2017) on usefulness of vocabulary learning strategies based on a program of vocabulary development among female EFL learners. In an experimental study, a sample of 123 females participated in the study. The selection and division of learners into experimental and control groups were random. Schmitt's questionnaire (1997) measured vocabulary learning strategies utilized by learners. A researcher-made vocabulary test was employed to test vocabulary size. The obtained results supported the existence of pretest and posttest scores differences in both experimental and control groups.

3.2. Language Learning Strategies in Relation to Language Performance

In Ghafournia's study (2014), the link between language learning strategies and university level was scrutinized. A sample of 406 EAP learners in associate, BA and MA degrees were picked up. They had enrolled in Islamic Azad University of Neyshabur. To determine their level of reading comprehension, a reading test was given to them and only those students obtained the middle score could participate in the study. A positive relationship between level of university and application of language learning strategies was manifested. In addition, it was revealed that course level and academic demand were influential factors in comprehending a reading text. In a similar study, Ramirez (1986) investigated the effects of years of language learning on using language learning strategies. A group of 105 English high school students learning French were studied in New York. The findings showed no difference between years of learning and strategy usage.

In a longitudinal study, Altmisdort (2010) sought the reasons of success and failure in language learning employing 92 Turkish university students. These students were classified into successful and unsuccessful learners. To explore the differences and commonalities of language learning and acquisition strategies, the researcher interviewed 120 students randomly. T. test and SPSS were run. The findings showed remarkable differences regarding strategy selection of successful and unsuccessful learners. Successful learners made use of all strategies but unsuccessful ones would utilize some strategies.

The effects of language proficiency on the selection of language context was explored by Javid, Al-thubaiti and Uthman (2012). The participants of this study were 240 Saudi English undergraduate students at Taif University. SILL and paired sample t. test were employed to figure out GPA differences. The results of this study suggested that language learners use diverse strategies with and without awareness. It was also revealed that the use of language learning strategies was more often by proficient language users as compared to the less proficient ones. They utilized metacognitive strategies more than social and cognitive strategies.

The connection between Iranian EFL learners and learning strategy usage has received some attention (Khaffafi Azar and Saeidi, 2013). The sample consisted of 200 English senior learners from various English academies in Tabriz. To do so, BALLI (Beliefs about Language Learning Inventory) and SILL (Strategy Inventory for Language learning) were utilized as instruments. The obtained results were indicative of a linear relationship between SILL and BALLI showing that learners having strong beliefs use learning strategies more frequently. It also suggested that familiarity with a learner's beliefs plays an indispensable part in understanding language strategies.

Altunay (2014) inspected distance education with regard to language learning strategies. This study was conducted on a sample of 63 distance learners majoring in Anadolu University in Turkey. For research purposes, Oxford (1990), SILL, interview, a questionnaire and a course book were used. The results of questionnaire were indicative of less use of affective strategies by distance language learners. The obtained results from interviews showed that learners do not like to use affective strategies because they ignore physical anxiety. Generally, learners feel more anxiety when they are involved in communication and this anxiety reduces being in friendly settings.

In a quasi-experimental study, Yang and Wang (2015) inquired into the relationship among EFL learning strategies, strategy instruction and self-efficacy. As

participants of study, 78 EFL learners both younger and older adults from universities of Taiwan were selected. A GEPT (General English Proficiency Test) was administered. To compare experimental and control group, ANCOVA was run to determine the level of proficiency. The findings of the study showed that language self-efficacy learning strategies and proficiency correlated. No difference was found in the reading or using different language learning strategies after training.

Investigation of the effectiveness of language learning strategies that the successful English language learners made use of, attracted the attention of many researchers (Lee and Heinz, 2016). With the participation of 20 translation students enrolling one of the translation schools of Korea. Through unstructured essay composition, students reported on the useful strategies to achieve English knowledge. In most reports, reading aloud and disciplined approach were pointed out. The results provided evidence that participants showed autonomy, self-regulation and monitoring features. Actually, they exhibited metacognitive strategies.

Erdogan and Ozdemir (2018) in an investigation tried to find the extent to which language learning strategies and learning approaches were related. Data were collected from 493 freshmen studying in a university of Turkey named Balikesir. Two instruments of SILL (Strategy Inventory of Language Learning) and ASSIST (Approaches and Study Skills Inventory for Students) were utilized. Both descriptive and inferential statistics were used to compute the reliability. The findings depict that there is a strong association between learning approach and strategy usage. The highest mean was held by engineering students who employed learning strategies more than other students.

4. Conclusion

The significance of vocabulary improvement has been acknowledged by many researchers (Carroll, 1964; Laufer and Ravenhorst-Kalovski, 2010; Nation, 2001; Schmitt, 2000). According to Schmitt (2000), vocabulary knowledge is greatly important to enhance language capability and vocabulary competence. Mizumoto and Takeuchi (2009) also claimed that the preferences of learners in strategy choice did not change significantly after and before strategy training. The present study determined the effect of strategy usage on vocabulary development. This study supplied additional information on how strategies of vocabulary learning can influence word proficiency. The results of review showed that strategy instruction can make beneficial changes in vocabulary learning. This study can deepen the students' understanding of different vocabulary strategies and their usefulness. This knowledge of strategies assists learners in selection of proper strategies.

One of the most striking results emerged from reviewing the related papers was that substantial growth of strategy training led to considerable increase in usage and frequency of language learning strategies. Practically, the findings of this study can aid teachers to utilize new strategies to improve the learners' knowledge of strategies and develop the vocabulary. It was revealed that learners were willing to use cognitive and metacognitive strategies because they were useful for them and fitted their learning styles. Findings of this study are in line with Blanco et al (2010), Mizumoto and Takeuchi's (2009) studies. They reported that learners' awareness of learning strategies has increased. This awareness enabled the learners to use strategies more frequently and to achieve higher level of vocabulary mastery.

To conclude, there is not any strategy that is the best one regarding individual differences in learning process. Different individuals employ various approaches for their learning. In sum, students prefer strategies that are compatible with their learning styles since they do not know the way of applying other strategies into existent learning environments. Therefore, teachers should provide guidance on special strategies and it is required to instruct the students how to make use of various strategies. As limitations of this study, it can be mentioned that the results cannot be generalized to different settings and age groups. In addition, learners may not report clearly and exactly the future use of strategies.

References

- Abbasian, G. & Hartoonian, A. (2014). Using Self-Regulated Learning Strategies in Enhancing Language Proficiency with a Focus on Reading Comprehension. http://dx.doi.org/10.5539/elt.v7n6p160
- Adams, MJ. (1990). Beginning to read: *Thinking and learning about print*. Cambridge, MA:MU Press.
- Al Asmari, AA. & Mahmoud Ismail, N. (2012). Self- regulated learning strategies as predictors of reading comprehension among students of English as a foreign language. *International Journal of Asian Social Science*, 2(2), 178-201.
- Alkharusi, H. (2018). Canonical Correlational Models of Students' Perceptions of Assessment Tasks, Motivational Orientations, and Learning Strategies, 68 3.35.67. *International Journal of Instruction, January 2013. Vol.6, No.1*
- Altmisdort, G. (2010). Assessment of language learners' strategies: Do they prefer learning or acquisition strategies? Retrieved from http://www.academicjournals.org/ERR.
- Altunay, A. (2014). Language Learning Strategies Used by Distance Learners of English: A study with a Group of Turkish Distance Learners of EFL. *Turkish Online Journal of Distance Education-TOJDE July 2014 ISSN 1302-6488 Volume: 15*
- Anjum, A., Shujaa Al Othmany, D., Hussain, A. (2015). Generalization of Individual Differences in Second Language Learning, 2222-288X, Vol.6, No.29.
- Barcroft, J. (2009). Strategies and performance in intentional L2 vocabulary learning. *Language Awareness*, 18(1), 74–89.
- Baumann, JF. & Kameenui, E.J. (1991). Research on vocabulary instruction: Ode to Voltaire. In Flood, Lapp, & Squire (Eds.), *Handbook of research on teaching the English language arts* (pp. 604—632). New York: MacMillan.
- Becker, WC. (1997). Teaching reading, reading rates for letters, words, and simple text in the development of reading achievement. *Reading Research Quarterly*, p. 223—253.
- Biggs, JB. & Pintrich. (1979). Individual differences in study processes and the quality of learning outcomes. *Higher Education*, *8*, *381-394*.
- Bilen, D. & Müge Tavil, Z. (2015). The Effects of Cooperative Learning Strategies on Vocabulary Skills of 4th Grade Students. 2324-8068, http://jets.redfame.com
- Blanco, M., Pino, M., & Rodriguez, B. (2010). Implementing a strategy awareness raising programme: Strategy changes and feedback. *Language Learning Journal*, 38, 51—65. Doi:10.1080/0957173100362065.
- Boucher, CR. (1986). Pragmatics: *The meaning of verbal language in learning disabled*. NY: Cambridge University Press.
- Bozinovic and Sindik, (2011). The effectiveness of strategy they use and develop problem-solving skills. Brown, H. H. (200). *Principles of language learning and teaching* (4th ed.). White Plains, NY: Longman.
- Carey, S. (1978). The child as word learner, in Halle, Bresman, & Miller (Eds.), *Linguistic theory and psychological reality*. (pp. 265—293). Cambridge, MA: MIT Press.
- Carnine, D., Silbert, J., & Kameenui, EJ. (1990). *Direct instruction reading*. Columbus, OH: Merrill Publishing Company.
- Carroll, J. B. (1964). Words, meanings and concepts. *Harvard Educational Review 34, 178—202.***Retrieved from http://www.hepg.org/main/her/Index.html

- Diaz, I. (2015). Training in metacognitive strategies for students' vocabulary improvement by using learning journals. *PROFILE Issues in Teachers' Professional Development, 17(1), 87-102.* http://dx.doi.org/10.15446/profile.v17n1.41632.
- Ehrman, ME., Leaver, BL., & Oxford, RL. (2003). A brief overview of individual differences in second language learning. *System*, 31, 313—330. http://dx.doi.org/10.1016/S0346-251X(03)00045-9
- Ellis, R. (1994). The study of second language acquisition. Oxford: Oxford University Press.
- Erdogan, T. & Ozdemir, E. (2018). An Investigation of Learning Approaches and Language Learning Strategies: Are They Related? *doi:* 10.5281/zenodo.1320506 Volume 4
- Fatima, I., Hussain, PZ. & Bahadur Khan, S. (2015). Investigating Learning Strategies for Vocabulary Development: A Comparative Study of Two Universities of Quetta, *Pakistan: 2203-4714. doi.org/10.7575/aiac.alls.v.7n.2p.7*
- Fawcett, AJ. & Nicolson, RI. (1991). Vocabulary training for children with dyslexia. *Journal of Learning Disabilities*, 24(6), 379—382.
- Fellenz, RA. & Conti, GJ. (1989). Learning and reality: Reflections on trends in adult learning.
- Columbus: The Ohio State University (ERIC Clearinghouse on Adult, Career, and Vocational Training, Information Series No. 336.
- Fewell, N. (2010). Language learning strategies and English language proficiency: An investigation of Japanese EFL university students. TESOL Journal, 2, 159—174, Retrieved from http://tesol-international-journal.com/wp-content/uploads/2013/11/A11V2 TESOL.pdf
- Ghafournia, N. (2014). Language learning strategy use and reading achievement. English Language Teaching, 7(4), 64-73. http://dx.doi.org/10.5539/elt.v7n4p64
- Ghost Bear, A. (2012). Technology, Learning, and Individual Differences. *Journal of Adult Education, Volume 41, Number 2, 2012*
- Graves, MF. (1986). *Vocabulary learning and instruction*. In E. Z. Rothkopf (Ed.), Review of research in education, la, 49—89.
- Griffiths, C. (2003). Patterns of language learning strategy use. *System*, *31*, *367-383*. *doi:10.1016/S0346-251X(03)00048-4*
- Gu, YQ. (2010). Learning strategies for vocabulary development. *Reflections on English Language Teaching*, 9(2), 105-118.
- Gu, Y. & Johnson, RK. (1996). Vocabulary Learning Strategies and Language Learning Outcomes. Language Learning, 46, 643-697. http://dx.doi.org/10.1111/j.1467-1770.1996.tb01355.x
- Güven, M. & Şimşek. (2004). Öğrenme stilleri ile öğrenme stratejileri arasındaki ilişki. Yayınlanmamış doktora tezi, Anadolu Üniversitesi, Eskişehir. *Journal of Education and Learning Vol. 2, No. 1; 2013. www.ccsenet.org/jel*
- Heidari, H., Izadi, M., & Ahmadian. (2012). The Relationship between Iranian EFL Learners' Self-efficacy Beliefs and Use of Vocabulary Learning Strategies. *English Language Teaching*, 1916-4750 174.
- Ismaiel, N. & Al Asmari, A. (2017). The Effectiveness of a programme-based Vocabulary Learning Strategies for Developing English Vocabulary for EFL Female Students at Taif University: 2203—4714. http://dx.doi.org/10.7575/aiac.alls.v.8n.3p.113
- Javid, C., Al-thubaiti, T., & Uthman, A. (2012). Effects of English Language Proficiency on the Choice of Language Learning Strategies by Saudi English-major Undergraduates: 1916-4750, http://dx.doi.org/10.5539/elt.v6n1p35
- Khaffafi, AF. & Saeidi, M. (2013). The Relationship between Iranian EFL Learners' Beliefs about Language Learning and Their Use of Learning Strategies. 1916-4742. http://dx.doi.org/10.5539/elt.v6n11p167
- Khatib, M., Hassanadeh, M., & Rezaei, S. (2011). Vocabulary learning strategies of Iranian Upper-intermediate EFL learners. *International Education Studies*, 4(2),144-52. http://dx.doi.org/10.5539/ies.v4n2p144
- Köksal, D. & Ulum, Ö. (2016). Language Learning Strategies of Turkish and Arabic Students: Across-Cultural Study. *European Journal of Foreign Language Teaching Volume 1*.
- Kubat, U. (2018). Identifying the Individual Differences Among Students During Learning and Teaching Process by Science Teachers. *International Journal of Research in Educational and Science*, (*IJRES*), 4(1), 30-38. doi: 10.21890/ijres.369746

- Lai, Y. (2013). Integrating vocabulary learning strategy instruction into EFL classrooms. *Taiwan Journal of TESOL. Vol. 10.1, 37—76, 2013*.
- Laufer, B. & Ravenhorst-Kalovski, G. C. (2010). Lexical threshold revisited: Lexical text coverage, learners' vocabulary size and reading comprehension. *Reading in a Foreign Language*, 22, 15—30, Retrieved from http://nflrc.hawaii.edu/rfl/
- Lawson, MJ. & Hogben, D. (1996). The vocabulary learning strategies of foreign-language students. *Language Learning journal*, 46, 101—135. http://dx.doi.org/10.1111/j.1467-1770.1996.tb00642.x
- Lee, J. & Heinz, M. (2016). English Language Learning Strategies Reported by AdvancedLanguage Learners. *Journal of International Education Research Second Quarter 2016 Volume 12, Number 2.*
- Liberman, I. & Liberman, A. (1990) Whole language vs. code emphasis: Underlying assumptions and their implications for reading instruction. *Annals of Dyslexia*, 4, 51—76.
- Lip, P. (2009). Investigating the Most Frequently Used and Most Useful Vocabulary Language Learning Strategies among Chinese EFL Postsecondary Students in Hong Kong. *Electronic Journal of Foreign Language Teaching*, 6(1), 77–87.
- McKeown, MG. & Curtis, ME. (1991). The nature of vocabulary acquisition. Hiilsdale, NJ: Erlbaum.
- Mizumoto, A. & Takeuchi, O. (2009). Examining the effectiveness of explicit instruction of vocabulary learning strategies with Japanese EFL university students. *Language Teaching Research*, 13, 425—449.
- Naeimi, M. (2015). Vocabulary Acquisition through Direct and Indirect Learning Strategies. School of Languages, Literacies and Translation. Universiti Sains Malaysia, Penang, Malaysia, http://dx.doi.org/10.5539/elt.v8n10p142
- Nagy, W. & Anderson, RC. (1984). How many words are there in printed school English? Reading Research.
- Nation, ISP. (2004). Learning vocabulary in another language. NY: Cambridge University Press.
- Nezami, E., Schwarzer, R., & Jerusalem, M. (1996). Persian Adaptation (Farsi) of the General Classification and relation to academic achievement and mathematical problem solving. *Instructional Science*, 31(6), 419—449.
- Nguyen, LTC., & Gu, Y. (2013). Strategy-based instruction: A learner-focused approach to developing learner autonomy. *Language Teaching Research*, 19, 9—30.
- O'Malley, L., Chamot, A., Stewner-Manzanares, J., Kupper, C., & Rocco P R. (1985). Learning strategies used by beginning and intermediate ESL students. *Language Learning*, (35), 21—46.
- Oxford, RL. (1990). Language learning strategies: What every teacher should know. Boston: Heinle & Heinle.
- Oxford, RL. (2001). Language learning styles and strategies. In M. Celce-Murcia (Ed.), *Teaching English as a second or foreign language*. Boston, MA: Heinle & Heinle.
- Oxford, RL. (2003). Language learning styles and strategies: An overview. *GALA*, 1—25. Retrieved from http://web.ntpu.edu.tw/~language/workshop/read2.pdf
- Oxford, RL, Ehrman, M, Leaver, B. (2003). A brief overview of individual differences in second language learning. *Syst.* 31:313-330
- Peacock, M. (2001). Match or mismatch? Learning styles and teaching styles in EFL. *International Journal of Applied Linguistics*, 11(1), 1—20. http://dx.doi.org/10.1111/1473-4192.00001
- Pintrich, PR., Smith, DAF., Garcia, T., Mckeachie, W. (1993). Reliability and predictive validity of the motivated strategies for learning questionnaire (MSLQ). *Educational and Psychological Measurement*, 53, 801-813.
- Politzer, R. (1983). An exploratory study of self-reported language learning behaviors and their relation to achievement. *Studies in Second Language Acquisition*, 6, 54–65.
- Rahimy, R., & Shams, K. (2012). An Investigation of the Effectiveness of Vocabulary. Learning Education Studies; Vol. 5, No. 5; 2012 Strategies on Iranian EFL Learners' Vocabulary Test Score
- Ramirez, G. (1986). Language learning strategies used by adolescents studying French in New York schools. *Foreign Language Annuals*, 19, 131-141.
- Reid, JM. (1995). Preface. In J. Reid (Ed.), Learning styles in the ESL/EFL classroom (pp. viii-xvii). Boston, MA: Heinle & Heinle.

- Scouller, K. (1998). The influence of assessment method on students' learning approaches: Multiple choice question examination versus assignment essay. *Higher Education*, *35*, *453*—*472*.
- Seddigh, F. & Shokrpour, N. (2012). Vocabulary Learning Strategies of Medical Students at Shiraz University of Medical Sciences: http://dx.doi.org/10.5539/elt.v5n2p160
- Şen, Ş. & Yılmaz, A. (2012). Üniversite öğrencilerinin epistemolojik inançları ve motivasyonları arasındaki ilişkinin kanonik korelasyon analizi ile incelenmesi. *Paper presented at The Turkish Republic of Northern Cyprus*.
- Smith, RM. (1998). *Learning how to learn: Applied theory for adults*. Great Britain: Open University Press.
- Schmitt, N. (1997). Vocabulary learning strategies. In N. Schmitt & M. McCarthy (Eds.), *Vocabulary: Description, acquisition and pedagogy* (pp. 199—227). NY: Cambridge University Press.
- Schmitt, N. (1997). Vocabulary in language teaching. NY: Cambridge University Press.
- Schmitt, N. (2000). Current trends in teaching second language vocabulary. In N. Schmitt & M. McCarthy (Eds.), *Vocabulary: Description, acquisition and pedagogy* (pp. 237—257). NY: Cambridge University Press.
- Schunk, DH. & Zimmerman, BJ. (2003). Self-regulation and learning. *Handbook of psychology*, 7, 59—79.
- Sherafat, Z., Kabiri, P., & Soori, A. (2015). The Differences between Iranian Male and Female Students in Using Language Learning Strategies. *Australian International Academic Centre, Australia Vol. 2 No. 2; April 2014*
- Stahl, SA. & Erickson, LG. (1986). The performance of third grade learning disabled boys on tasks at different levels of language: A model-based exploration. *Journal of learning Disabilities*, 9(5), 285-290.
- Stanovich, KE. (1986). Matthew effects in reading: Some consequences of individual differences in the acquisition of literacy. *Reading Research Quarterly, 21, 360—406*.
- Struyven, K., Dochy, F., & Janssens, S. (2002). Students' Perceptions About Assessment in Higher Education: A review. Paper presented at the Joint Northumbria/Earli SIS Assessment and Evaluation Conference: Learning communities and assessment cultures, University of Northumbria at Newcastle, Retrieved September 11, 2006. Retrieved from http://www.leeds.ac.uk/educol/documents/00002255.htm Ullah, R., Richardson, J. T. E., & Hafeez.
- Swanson, HL. (1986). Memory performance in learning disabled students through semantic processing. *Learning Disabilities Research*, *5*(1), 25—32.
- Teng, F. (2014a). Research into practice: Strategies for teaching and learning vocabulary. *Beyond Words*, 2(2), 41-57.
- Teng, F. (2014b). Assessing the depth and breadth of vocabulary knowledge with listening comprehension. *PASAA*, 48(2), 29—56.
- Walker, SC. & Poteet, JA. (1989). Influencing memory performance in learning disabled through semantic processing. *Learning Disabilities Research*, *5*(1),25-32.
- Wei, M. (2007). An examination of vocabulary learning of college- level learners of English in China. The Asian EFL Journal, 9(2), 93–114.
- Wittrock, MC. (1986). Students' thought processes. In M. C. Wittrock (Ed.), *Handbook of research on teaching*. New York: Macmillan.
- Yang, P. & Wang, A. (2015). Investigating the relationship among language learning strategies, English self-efficacy, and explicit strategy instructions. *Taiwan Journal of TESOL. Vol. 12.1, 35-62, 2015*
- Zokaee, S., Zaferanieh, E., & Naseri, M. (2012). On the Impacts of Perceptual Learning Style and Gender on Iranian Undergraduate EFL Learners' Choice of Vocabulary Learning.