Exploring Self-Regulatory Strategies for Depth of Vocabulary Knowledge among Iranian EFL Upper Intermediate and Advanced Levels Learners

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Abstract

The present study investigated the relationship between self-regulated strategies and depth of vocabulary knowledge. To response the objective of the study, a convenient sampling used and 80 students of the English language from Bahar-e-Karaj institution in Iran were chosen in the study. For this purpose, the researchers made use of two main instruments: the self-regulation capacity in vocabulary learning scale developed by Tseng et al. (2006) and word associates test developed by Read (1998). The analysis of the data revealed that there was no relationship between the depth of vocabulary knowledge and self-regulatory strategies of EFL learners studying English, In addition, based on a Mann-Whitney Test and Independent-Samples T-Test which was run to examine the difference between the reported use of self-regulation strategies between the two groups of the participants as having a high and low depth of vocabulary knowledge, The results of the data analysis indicated a significant difference between these variables.

Key words: self-regulatory strategies, depth of vocabulary knowledge, breadth of vocabulary knowledge

Introduction

In development of language proficiency, vocabulary has been considered as a central role and it is necessary for learners to be proficient in second language (Nedaee, 2016). Additionally, according to Laufer and Sim (1985), vocabulary is the most pressing need for those who are learning another language. Besides, "the single most important task facing language learners is acquiring a sufficiently large vocabulary"(Lewis, 2000, p.8). Moreover, in 2005, Hunt and Beglar noted that" the heart of language comprehension and use is lexicon "(p.24). Nedaee (2016) stated that learners to express themselves, need to have a pool of the lexical items. Therefore, their acquisition is essential for being proficient in the second language (Nedaee, 2016). Depth and breadth of knowledge are considered important issues regarding the concept of vocabulary. Qian (1998) stated that vocabulary depth and breadth has the main role in understanding material. So, learning vocabulary knowledge is receiving more attention. Most researchers and language teaching specialists studied on breadth and depth of vocabulary knowledge concerning language skills and indicated that to gain control over productive and receptive skills, different dimensions of vocabulary are significant. (Akbarian,2010; Esmaeli,2013; Farvardin & Koosha,2011; Feng,2014; Hashemi,2013; Mehrpour, Razmjo&Kian,2011; Qian,1998; Steahr,2008).

Self-regulatory learning strategy is another strategy that is adopted by scholars and it regards a vocabulary learning experience. (e.g., Fan, 2003; Gu, 2003; Gu& Johnson, 1996; Kojic-Sabo & Lightbown, 1999; Lawson& Hogben, 1996). According to these researchers' investigation, different levels of vocabulary acquisition in learners can be related to the use of certain Cognitive and metacognitive regulation strategies (Ma, 2013). Self-regulated learning strategy is one of the less attended areas in learning and teaching vocabulary (Nedaee, 2016). According to Pintrich (2000), self-regulated learning is" an active, constructive process whereby learners set goals for their learning and then attempt to monitor, regulate, and control their cognitive, motivation, and behaviour, guided and constrained by their goals and the contextual features in the environment"(p.453).

A plethora of studies have been conducted on depth of vocabulary knowledge in the first language (L1) (Anderson & Freebody, 1981; Mezynski, 1983) and second language (L2) (Qian, 1998, 2002; Read, 1993), due to the complex nature of the depth of vocabulary knowledge, more research is still necessary. According to Nassaji (2004) Vocabulary Knowledge Scale (VKS) which was developed by Paribakht and Wesche (1993), is used to measure the depth of vocabulary knowledge. This test includes self-report format in which learners are asked to indicate their degree of knowledge on a scale of 1 to 5, ranging from no familiarity to the target word to the ability to use it accurately in a sentence. Due to not assessing the relationship between the meanings of words, Word-Associate Test is developed by Read (1993, 1998). A widely adopted research tool used to investigate L2 learners' depth of vocabulary knowledge is Read's (1993, 1998) word Association Test(WAT), which measures knowledge of individual words through a receptive word association tasks and attempt to measure learners' general qualitative knowledge of lexicon. There is a significant relationship between the depth of vocabulary knowledge and the degree and the type of strategy use and success (Nassaji, 2006). According to his research consequences, learners with a stronger depth of vocabulary knowledge used certain strategies more frequently than their weaker counterparts. Nassaji (2006) claimed that the depth of vocabulary knowledge has an important effect on inferential success made by the learners' degree of strategy use.

Research on self-regulation learning appeared more than two decades ago to respond to the question of how learners become masters of their learning processes (Zimmerman, 2008). According to Abdulhay (2015), in recent years, there has been growing attention in self-regulation in numerous domains of studies, such as medicine, technology, education, sport, etc. Zimmerman (2000) mentioned self-regulation as the degree to which learners are motivational, metacognitively, and behaviorly active in their learning process and in attaining their purposes. Self-regulation is the procedure of constantly observing progress toward an aim, examining results, and redirecting unsuccessful attempts (Berk, 2003).

Former studies have proven that self-regulated skills can foster learning (Ertmer, Newby, & MacDougall, 1996; Lindner & Harris, 1998; Weinsten, 1989; Zimmerman, 2000). Furthermore, some studies which have surveyed the relationship between the learners' self-regulatory behaviour and their attainment in different areas of learning (e.g., Hong, Pang & Rowell, 2009; Kitsantas, Steen, & Huie, 2009; Kozlowski& Bell, 2006; Oettingen, Honig, & Collwitzer, 2000; Young, 2005) have found a positive connection between these two concepts.

Significance of the study

The finding of this study could be of great significance to teachers. By knowing the number of effective strategies, teachers will be able to improve the learners' learning and help students take more responsibility for their learning and become autonomous. Therefore,

teachers can teach learners essential vocabularies at each level of language learning to achieve the best outcome. Most important, teachers would gain beneficial information about students' self-regulation vocabulary learning strategies and then they could provide appropriate tasks for their students in the classroom.

Purpose of the study

This study aimed to examine the relationship between self-regulated strategies and depth of vocabulary knowledge. First, the relationship between the depth of vocabulary knowledge and self-regulatory strategies was examined. Finally, this study investigated the difference between self-regulatory strategies employed by two groups as having high and low depth of vocabulary knowledge. Besides the theoretical purpose, the practical goal of the study can be considered a way to highlight the importance of self-regulatory as a learning strategy in order to learn vocabulary and increase the depth of vocabulary. This way the learners and teachers would be aware of the so called significance.

Research questions and hypothesis

Q1. Is there any statistically significant relationship between the depth of vocabulary knowledge and self-regulatory strategies of Iranian female EFL learners studying English at private language institutes?

Q2. Is there any statistically significant difference between the reported use of self-regulation strategies between the two groups of the participants as having a high and low depth of vocabulary knowledge?

Accordingly the present study had two null hypothesis:

H1. There is not any statistically significant relationship between the depth of vocabulary knowledge and self-regulatory strategies of Iranian female EFL learners studying English at private language institutes.

H2. There is not any statistically significant difference between the reported use of self-regulation strategies between the two groups of the participants as having a high and low depth of vocabulary knowledge.

Method

Participants

A convenient sample of 80 students of the English language from Bahar-e-Karaj institution in Iran participated in the study. They ranged in age from 18 to 30. They were all female and native speaker of Persian language. Their proficiency level was upper-intermediate and advanced. These learners had studied English at least 5 years at this Institute. It is worth mentioning that 100 students participated in the study, but due to some problems, especially the existence of some anonymous questionnaire responses and impossibility of matching the responses with the participants' corresponding vocabulary size scores, or not understanding the correct way to answer the questions, especially Word Associates Test, the researcher could only use the responses of 80 students and include them in the final data analysis.

Instruments

In this study, two instruments were used in order to respond to research questions. These instruments were in the form of a questionnaire which involves Self-Regulation Capacity scale and Word Associates Test (WAT). The Questionnaire of self-regulation capacity in

vocabulary learning was used to measure SRL strategies which are used in studying English. It was developed by Tseng, Dornyei and Schmitt (2006). The SRCvoc, a self-reporting questionnaire, is for students of EFL or ESL by requiring them to answer the questions on their language-strategy. The scale has been developed based on the theoretical construct of self-regulation developed by Dörnyei (2001). Word Associates test developed by Read (1998). Version 3.1 of this test was used to measure participants' depth of vocabulary knowledge through word Association. This test was approved to measure test-takers" depth of receptive English vocabulary knowledge in terms of three components: synonymy, polysemy, and collocation. This version of the test consists of 50 items, each comprising a target word followed by a list of eight words, four of which are related to the target word whereas the other four are not. The test-takers are required to identify the four words which are semantically related to the target word, so each item has four correct choices.

Data Analysis

In analyzing the first research question, the focus was on investigating the probable relationship between the depth of vocabulary knowledge and self-regulatory strategies and as the result of normality, Spearman's rho was used as the appropriate formula. Concerning the second research question, due to the non-parametric date, a Mann-Whitney test was utilized to make it obvious whether their difference is significant or not.

Procedure

The study was conducted in order to investigate the relationship between the self-regulatory and depth of vocabulary knowledge as two variables of the study. In order to collect data the two questionnaire were administered and the participants were asked to answer the questions. There was no time limit for answering the questionnaires. At last, due to some problems, especially the existence of some anonymous questionnaire responses and impossibility of matching the responses with the participants' corresponding vocabulary size scores, or not understanding the correct way to answer the questionnaire, especially Word Associates Test, the researcher could only use the responses of 80 students and included them in the final data analysis. Finally, the collected data was analyzed by statistical methods.

The present study was conducted to investigate the relationship between self-regulatory strategies and depth and breadth of vocabulary between Iranian EFL learners, then it assessed the difference between self-regulatory strategies of two groups as having high and low depth and breadth of vocabulary knowledge. In this study quantitative method design is used to provide appropriate responses to each research question.

Results

Table 4.1
The Correlation between the Depth of Vocabulary Knowledge and the Self-Regulatory Strategies of Iranian Female EFL Learners

		Depth of Vocabulary Knowledge
Self-Regulation	Spearman's rho	-.15
	Sig. (2-tailed)	.18
	N	.80

Note. According to the classification, Muijs (2004) provided, a correlation is considered as weak if the value is between 0 to +/–.1, is modest in case the value is between +/–.1 to .3, is moderate if the value is between +/–.3 to .5, is strong if the value is between +/–.5 to .8, and is very strong if the value is higher than +/–.8. Bearing this classification in mind and

checking Table 4.1, the conclusion is that there is a modest negative correlation between the depth of vocabulary knowledge and self-regulatory strategies of Iranian female EFL learners since the *r* value is reported as -.15, which is between +/–.1 to .3. The information provided in the second row makes it clear that the calculated coefficient of correlation (*r* = -.15) cannot be considered statistically significant because of the significant value reported as .18 which is smaller than the standard level (*p* = .18; *a* = .05; *p* > *a*). Therefore, the first null hypothesis was rejected.

Table 4.2
Descriptive Statistics of the Word Associate Test of both Higher and Lower Groups of the Depth of Vocabulary Knowledge

	The Higher Group	The Lower Group
N	40	40
Mean	109.05	84.18
Median	106.00	92.00
Std. Deviation	13.88	16.41
Range	85	52
Minimum	100	48
Maximum	185	100

Note. Table 4.2 shows the mean scores of the performance of the participants of the two groups of the higher and lower depth of vocabulary knowledge. Checking the two mean scores, it becomes obvious that they did perform differently from each other as their mean scores are 109.05 and 84.14 for the two groups of. However, to decide about whether this difference has been significant or not, a Mann-Whitney Test was run and its outcomes are presented below.

Table 4.3
Mann-Whitney test of the Word Associate Test of both Higher and Lower Groups of the Depth of Vocabulary Knowledge

Total N	80
Mann-Whitney U	2.00
Wilcoxon W	822.00
Test Statistic (Z value)	-7.68
Asymptotic Sig.(2-sided test)	.00*

Note. Checking the significance value reported in Table 4.3 for the amount of the difference between the two groups' performance in the word associate test, which is .00, the conclusion is that the participants performed significantly different from each other on this test (*p* = .00; *a* = .05; *p* < *a*). That is to say, there was a statistically significant difference between the reported use of self-regulation strategies between the two groups of the participants as having a high and low depth of vocabulary knowledge and hence the answer to the third research question is YES.

Discussion

This study set out with the aim of determining the relationship between self-regulated strategies and depth and breadth of vocabulary knowledge. The initial the objective of the project was to identify whether there is any statistically the significant relationship between the depth and breadth of vocabulary knowledge and self-regulatory strategies of learners and

also to find out the extent of difference between the reported use of self-regulation strategies between the two groups of the participants as having a high and low depth and breadth of vocabulary knowledge.

It can be seen that the findings of this study are in line with previous studies which are done in the domain of self-regulatory strategy use and vocabulary size (Amirian, Mallahi, & Zaghi, 2015; Vujnović, 2017; Zarei & Hatami, 2012; Rezvani & Pourshahian's, 2012). Although they investigated the relationship between self-regulated learning strategies and breadth of vocabulary knowledge of the learners and did no emphasis on depth of vocabulary knowledge, their findings reveal that the correlations between the self-regulated vocabulary learning strategies and the vocabulary size of the participants were very small and negative. For example, Zarei and Hatami (2012) found no significant relationship between self-regulated components and the vocabulary knowledge of their participants. Similarly, in Rezvani and Pourshahian's (2012) study the correlation between the vocabulary strategies and the vocabulary size of the participants were very small and negative.

This finding is contrary to some previous studies which have investigated the learners' self-regulatory behavior in numerous fields of learning (e.g., Hong, Pang & Rowell, 2009; Kistantas, Steen, & Huie, 2009; Kozlowski& Bell, 2006; Magno, 2011; Oettingen, Honig, & Collwitzer, 2000; Young, 2005). Their findings expose that there is a significant positive relationship between self-regulated learning strategies and learners' achievement. For example, in Zarei and Hatami's (2012) study, some components of self-regulation (self–checking and effort) were positively related to their vocabulary knowledge and reading comprehension while others were not. However, Hamzah, Kafipour and Abdullah (2009) found a significant relationship between all vocabulary learning strategies and overall vocabulary level of the students.

However, the findings of the current study do not support the previous researches. This might mean that learners' self-regulation capacity may not be a determining feature in vocabulary acquisition (Amirian et al., 2015). The reason behind it may be that learners do not know how to employ self-regulation strategies (Zumbrunn et al., 2011). "The familiar strategies leave learners with a less effective mean to their learning to while new self-regulated strategies, which demand some time and effort to learn and practice them, would lead to meaningful learning and better results" (Vujnović, 2017, p.28).

Moreover, according to Ma Ping and Siraj (2012), the learners encounter some difficulties while learning new vocabulary, this might reduce their self-efficacy in vocabulary learning, reduce effective self-regulation strategies and cause lack of vocabulary knowledge.

Conclusion

The project was undertaken to investigate the relationship between self-regulated strategies and depth of vocabulary knowledge among Iranian EFL Upper-Intermediate and Advanced Levels Learners and also the difference between the reported use of self-regulation strategies between the two groups of the participants as having a high and low depth of vocabulary knowledge. The results of the data analysis indicated no significant relationship between these two variables. Furthermore, there was a difference between the reported use of self-regulation strategies between the two groups of the participants as having a high and low depth of vocabulary knowledge. Also, it was found that the students who had more self-regulation, had better information in depth of vocabulary knowledge. For further research, it would be interesting to collect data from a large-scale study and to compare all levels of proficiency or emphasis on the effect of gender in self-regulated learning strategies.

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