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Vocabulary Recall Improvement through Acronyms: A Case Study of Iranian Advanced EFL Learners



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Abstract

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Keywords:

Acronym,
EFL Learners,
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This study aimed at investigating the effects of using acronyms on improving vocabulary recall among Iranian EFL learners. To this aim, 20 advanced EFL learners were selected and randomly assigned to two groups; namely, experimental and control. The data collection instruments were a vocabulary test consisting of some multiple-choice items and a questionnaire for exploring the participants' perceptions of using acronyms for improving vocabulary recall. Eighty target words chosen from a textbook entitled, *General English Language* (2nd ed.), authored by Jafari, were also provided as the materials of the study. The vocabulary test was administered to the participants as pretest and posttest prior to and after the treatment. The findings revealed that using acronyms had a significant effect on improving vocabulary recall among the learners in the experimental group. Moreover, the participants in the experimental group had positive perceptions of the effects of using acronyms on improving vocabulary recall. The findings of this research are beneficial for those who are concerned with English learning and teaching including learners, teachers and researchers.

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Introduction

During the past three decades, the world has experienced different radical changes. These changes cover a wide range of political, technological, social, and cultural changes respectively. These changes lead people to new needs in order to be adapted to new conditions. The language learning and teaching is one of the most important requirements which have been produced due to these changes. Certainly, the second or foreign language plays a significant role in today's world and affects people's lives. People all over the world are trying to learn English as a second or even a third language in order to study at an English medium university or living in a foreign country (Kafipour & Yazdi, 2014).

Moreover, knowledge of words and their meaning is a crucial component of language proficiency for both first language acquisition and second language learning (Alipour, 2020; Salehi, 2017). In fact, "vocabulary knowledge plays a basic role in acquiring other skills of each language" (Fakher Ajabshir, 2011, p. 46). According to Salehi and Jafarigohar (2011, p. 125), "foreign or second language learners may use different strategies to acquire the vocabularies in the target language. Given the importance of this fact, language researchers have sought to classify vocabulary learning strategies applied by foreign and second language learners". Therefore, there is a need to use the most efficient memory strategies for vocabulary recall.

One way for improving vocabulary recall among EFL learners is using memory strategy. According to Salehi and Jafarigohar (2011), "memory strategy instruction is an essential part of any foreign or second language program. There are a large number of mnemonic strategies depending on how they are classified, and their possible range extends beyond the learning of vocabulary" (p. 123). Moreover, Zheng (2010) stated that students of different levels use strategies in different ways. Advanced learners are more creative and have a better and more solid knowledge in vocabulary. Students at low levels are more limited in their usage of vocabulary knowledge. In fact, Rahimy and Shams (2012) suggested that "Memory strategy use was portrayed both in short and long-term retention. The next most frequently used strategies were cognitive and compensation strategies respectively" (p. 145). On the other hand, "some of the most popular mnemonic strategies are pegs, imagery, loci, acronyms, physical response, rhymes, keywords, spatial grouping, chaining, acrostic, and image-naming" (Salehi & Jafarigohar, 2011, p. 123).

Fazeli (2010) claimed that “pedagogically assumed abbreviations and acronyms in learning and testing of vocabulary procedures can be developed in order to have easier and better learning and longer retention of meaning aspect of vocabulary learning procedure for the learners” (p. 411). Izura and Playfoot (2012) conducted a study in relation to the use of acronyms for vocabulary recall ability on 120 learners. The results of their study showed that using acronyms was a useful process for better vocabulary recall.

Literature Review

According to Yeates (1999), “acronyms are a type of abbreviation made up of the initial letters or syllables of other words” (p. 1). In fact, Yeates (1999) suggested that “acronym lists are available from a number of sources, but these are static; they list acronyms current in some domain at the time of compilation or officially in use in a domain or organization” (p. 2). As Hock and Noice (1987) stated, “letters in briefly presented masked letter strings were detected more accurately when the strings were three-consonant acronyms than when they were non words” (p. 485).

Since the acronyms are found in the text with their definitions, the probability that they are correct is quite high; they can be used to build a database of acronyms automatically and locate instances of these acronyms in the current document or other documents. These extracted features can also be used to enhance retrieval and/or identify associations and relationships to be used for a hypertext browsing system (Gilbreth & Taghva, 1999).

With the advent of learner-centered and communicative teaching methodologies, language learning strategies in general and mnemonic strategies in particular have been brought to the fore as interesting topics warranting much research. At the same time, vocabulary has been much studied following the emergence of communicative approaches to language teaching (Namaziandost et al. 2020). Salehi and Jafarigohar (2011) investigated the effectiveness of mnemonic strategies on teaching English vocabulary to Iranian high school students. The participating subjects included all male Iranian high school grade one students studying in a non-profit high school in Tehran. Based on the results obtained from a Nelson test of English language proficiency which was conducted at the beginning of the study, 60 homogeneous students were chosen from among 105 learners. To assure the novelty of to-be-instructed words, a vocabulary pretest was also administered. The participants were then classified into an experimental and a

control group each comprising 30 students. The participants in experimental group were instructed to employ the three vocabulary mnemonic strategies of imagery, physical response, and spatial grouping, whereas the students in the control group were suggested to use the repetitive method of learning new words by memorizing a Persian equivalent for each word (i.e. rote learning). The results of the posttest data analysis confirmed the superiority of the experimental group over the control group.

Nilforoushan (2012) examined the effect of teaching vocabulary through semantic mapping on the awareness of two affective dimensions, evaluation and potency dimensions of deep vocabulary knowledge as well as the general vocabulary knowledge of EFL students. Sixty intermediate EFL female adult learners participated in this study; they were chosen from 90 students through Preliminary English Test and a general vocabulary knowledge test. They were thus randomly divided into two groups, experimental and control, each consisting 30 students. As for the treatment, modifiers describing people's characteristics were taught in the text and through semantic mapping, whereas these words were taught by usual vocabulary instruction in control group. At the end, students took a vocabulary achievement test and a test of awareness of evaluation and potency dimensions of deep vocabulary knowledge. The findings showed that teaching vocabularies through semantic mapping significantly improved learner awareness of the two dimensions.

Banisaeid (2013) examined the relationship between memory strategies and vocabulary recall and also comparative effects of memory and cognitive strategies training on intermediate EFL learners' vocabulary learning. She classified students into two experimental groups. In order to omit the words learners, know, a pretest of vocabulary was held. In the first experimental group, 30 students received instruction by memory strategies (keyword and semantic map) in word learning and in the other experimental group, another 30 students were under instruction through cognitive strategies in order to learn the same new English words (flashcards and repetition). The course lasted for 11 sessions (two-hour sessions per week). Finally, the data were gathered by a teacher-made test as the posttest including 60 open ended items. The results indicated that there was no significant difference between the effect of cognitive and memory strategy instruction on intermediate EFL learners' word learning. Generally, the findings showed that instruction by

memory strategies and cognitive strategies respectively improved using memory and cognitive strategies.

Nemati (2009) investigated the effects of teaching by memory strategies on experimental group comparison to control group, in which students were taught the meaning of new vocabulary items through giving synonyms and mini-contexts. The results are studied in the students' short-term and long-term retention. The participants of the study were 310 Indian female pre-university students. The findings showed that experimental group was better both in short-term and long-term scores resulting in the superiority of memory strategies in short-term and long-term retention.

Besides, Sozler (2012) examined the effects of strategy training on vocabulary development among secondary school students. The participants were 26 students studying in an Austrian public secondary school located in the lower part of Austria. An achievement test and a questionnaire were used as pre, post and long-term retention tests to measure the effect of the memory strategy training on the participants' vocabulary development. The findings showed that using memory strategies as a vocabulary learning technique was more effective than using word lists to improve vocabulary level.

One method to acquire new words is keyword method that could help students retain those words in long-term memory. Gruneberg and Pascoe (1996) investigated the effectiveness of the keyword method for receptive and productive foreign vocabulary learning in the elderly people. They found that 40 female elderly participants significantly enhanced their receptive and productive learning of 20 Spanish words, in comparison to a control group who received no treatment.

Brahler and Walker (2008, as cited in Siriganjanavong, 2013) classified their subjects into three groups, namely, the keyword method, rote memorization, and the combination of both. The results showed that students in the keyword group significantly improved in comparison to the other two groups in terms of recall. In other words, the keyword group could recall the medical terminology better than rote memorization group or the mixed method group. In Brown and Perry's (1991, as cited in Siriganjanavong, 2013), the results showed that students in the keyword group got a higher score in the immediate test, and its effect on low-proficiency students was greater; however, the students in the combined keyword-semantic strategy could remember the words better than using only one strategy in the 9-day delayed test.

The present study aimed to answer the following research questions:

RQ1. Does using acronyms significantly affect Iranian EFL learners' vocabulary recall?

RQ2. How do Iranian EFL learners perceive the effects of using acronyms on improving vocabulary recall?

Method

Twenty Iranian female advanced EFL students were selected from those studying in Shahrekord Payame Noor University. They were randomly assigned to two groups of experimental and control each comprising 10 students. All the participants were at the age range of 20 to 25 years old and they were native speakers of Persian language. The study included 10 weeks of training, one session a week and each session lasting for 45 minutes.

The main data collection instruments were a 40-item vocabulary pretest/posttest and a questionnaire for exploring the participants' perceptions of using acronyms for improving vocabulary recall. In order to examine whether the students were homogeneous, the Oxford Placement Test (OPT) was conducted at the beginning of the study. Eighty target words chosen from a textbook entitled *General English Language* (2nd ed.) authored by Jafari (2013) were also provided as the materials of the study. Prior to conducting the main study, a pilot study was administered to 10 advanced EFL learners in order to check the reliability of the test. To ensure the validity of the test, two experts in TEFL were invited to check it.

In the first session of the treatment, a vocabulary pretest was conducted to examine the participants' ability to recall the vocabulary items. In each session, 10 words with their synonyms were taught to the students. The participants in the control group received the usual vocabulary instruction whereas in the experimental group these vocabulary items were taught through acronyms. At the end of each session, the synonyms of the words were also asked from the students. In the last session, the participants were given a vocabulary posttest consisting of some multiple-choice items to compare the participants' vocabulary recall ability in the control and experimental groups. A questionnaire was also distributed among the participants in the experimental group to examine their perceptions of using acronyms for improving vocabulary recall. After the data were collected, both descriptive and inferential statistics were used to analyze the obtained data.

Results

Addressing Research Question One

The first research question was posed to investigate if using acronyms significantly affects Iranian EFL learners' vocabulary recall. To find answers to this question, paired-sample *t*-test and an independent-sample *t*-test were conducted by the researcher.

Table 1 shows the mean scores and standard deviations of the participants in the experimental group on the pretest ($M = 13.7, SD = 1.27$) and the posttest ($M = 18.95, SD = .86$). The mean score of the participants on the posttest was greater than their mean score on the pretest. To understand if this difference was statistically significant or not, a paired-sample *t*-test was conducted.

Table 1

Descriptive Statistics of the Experimental Group

		Mean	<i>N</i>	Std. Deviation	Std. Error Mean
Pair 1	Pretest	13.700	10	1.2737	.4028
	Posttest	18.950	10	.8644	.2734

As Table 2 below shows, there was a significant difference between the mean scores of the participants on the pretest and the posttest since the *p* value was lower than .05 ($p < .001$). Therefore, using acronyms had a significant effect on the participants' vocabulary recall.

Table 2

Results of the Paired-Sample t-Test for the Experimental Group

		Paired Differences					<i>T</i>	<i>df</i>	Sig. (2-tailed)
Pair		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Pretest –	-					30.741	9	.000
	Posttest	5.2500	.5401	.1708	-5.6363	-4.8637			

Table 3 below shows the mean scores and standard deviations of the participants in the control group on the pretest ($M = 13.55$, $SD = 1.32$) and the posttest ($M = 13.75$, $SD = 1.23$). The mean score of the participants on the posttest was slightly greater than their mean score on the pretest. To understand if this difference was statistically significant or not, a paired-sample t -test was conducted.

Table 3

Descriptive Statistics of the Control Group

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pretest	13.550	10	1.3218	.4180
	Posttest	13.750	10	1.2304	.3891

As Table 4 shows, there was a not significant difference between the mean scores of the participants on the pretest and the posttest since the p value was greater than .05 ($p = .373$). Therefore, using the traditional method did not have a significant effect on the participants' vocabulary recall.

Table 4

Results of the Paired-Sample t -Test for the Control Group

		Paired Differences					T	df	Sig. (2-tailed)
Pair		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
1	Pretest - Posttest	-.2000	.6749	.2134	-.6828	.2828	-.937	9	.373

Table 5 shows the mean scores and standard deviations of the participants in the control group ($M = 13.75$, $SD = 1.23$) and the experimental group ($M = 18.95$, $SD = .86$). It is obvious that the participants in the experimental group outperformed on the posttest. To make sure that this difference was statistically significant, an Independent-Samples t -test was conducted.

Table 5

Descriptive Statistics of the Two Groups on the Posttest

	Groups	<i>N</i>	Mean	Std. Deviation	Std. Error Mean
Posttest	Control	10	13.750	1.2304	.3891
	Experimental	10	18.950	.8644	.2734

As Table 6 below shows, there was a significant difference between the mean scores of the participants in the control group and in the experimental on the posttest since the p value was lower than .05 ($p < .001$). Therefore, using acronym had a significant effect on the participants' vocabulary recall. The results are also illustrated in Figure 1.

Table 6

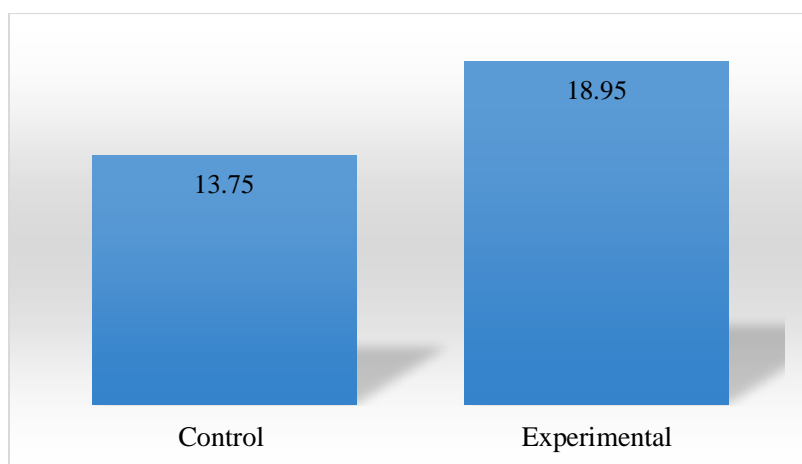
Results of the Independent-Samples t -Test

		Levene's Test for Equality of Variances		t -test for Equality of Means						
		<i>F</i>	<i>Sig.</i>	<i>T</i>	<i>Df</i>	<i>Sig.</i> (2- tailed)	Mean Difference	<i>Std.</i> Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper	
Posttest	Equal variances assumed	1.550	.229	- 10.785	18	.000	-5.2500	.4868	-6.2727	-4.2273

Equal							
variances	-	15.840	.000	-5.2500	.4868	-6.2828	-4.2172
not	10.785						
assumed							

Figure 1

Mean Scores of the Groups on the Posttest



Addressing Research Question Two

The second research question was posed to investigate how Iranian EFL learners perceive the effects of using acronyms on improving vocabulary recall. To answer this research question, a questionnaire was administered to the participants in the experimental group.

Table 7 shows the mean score and standard deviation of the participants' answers to the items of the questionnaire ($M = 4.38$, $SD = .59$). The obtained mean score was greater than the criterion mean score (3.00). The one-sample t -test was conducted to make sure this difference was statistically significant.

Table 7*Descriptive Statistics of the Questionnaire*

	<i>N</i>	<i>Mean</i>	<i>Std. Deviation</i>	<i>Std. Error Mean</i>
Questionnaire	10	4.385	.5850	.1850

As Table 8 shows, there was a statistically significant difference between the obtained mean scores and the criterion because the p value was lower than .05 ($p < .001$). Therefore, the participants had significant positive perceptions.

Table 8*Results of the One-Sample t-Test*

Test Value = 3.00					
<i>T</i>	<i>df</i>	<i>Sig. (2-tailed)</i>	<i>Mean Difference</i>	95% Confidence Interval of the Difference	
				Lower	Upper
Questionnaire	7.4869	.000	1.3850	.967	1.803

Discussion and Conclusion

The findings showed that the mean score of the participants on the posttest in the experimental group was greater than their mean score on the pretest. Therefore, using acronyms had a significant effect on the participants' vocabulary recall. According to Fazeli (2010), "acronym strategy is an easy applicable strategy for learners to code the meaning of new vocabularies, especially when they find difficulty in learning them" (p. 415). The findings of this study put remarkable emphasis on the effectiveness of using acronyms on vocabulary recall. Thus, the hypothesis stating that using acronyms does not significantly affect Iranian EFL learners' vocabulary recall can be certainly rejected.

The results of the study suggest that vocabulary learning strategy training can bring about positive effects in students' learning. In fact, the majority of the participants in this study reported using a greater number of strategies and using more frequent strategies. The findings also revealed that strategy training can affect students' strategy choice differently, depending on the level of their vocabulary (Lai, 2013).

Based on the results of the questionnaire, it was clear that using acronyms helped learners to recall vocabulary easily. Therefore, acronyms can be helpful for vocabulary recall. Moreover, they can motivate learners to recall vocabulary better. As the findings of a great number of previous studies indicated, acronyms as a memory strategy play a central role in the process of learning a foreign language and it is a useful process for vocabulary recall. Therefore, L2 teachers are strongly proposed to apply acronyms in L2 classes to help learners recall vocabulary better and increase their motivation and self-confidence. Generally, acronyms are beneficial for vocabulary recall among advanced EFL learners.

This study predominantly focused on the application of acronyms for vocabulary recall among Iranian EFL learners; therefore, there are some suggestions for further research as follows:

1. More studies can be conducted to investigate the same independent variable in relation to other language sub-skills.
2. The same independent and dependent variables can be examined involving learners with different proficiency levels.
3. Since this study was limited to only female EFL learners, similar studies can be conducted with other participants including both male and female ones.

References

- Alipour, P. (2020). A comparative study of online vs. blended learning on vocabulary development among intermediate EFL learners. *Cogent Education*, 7(1). DOI: 10.1080/2331186X.2020.1857489.
- Banisaeid, M. (2013). Comparative effect of memory and cognitive strategies on EFL intermediate learners' vocabulary learning. *English Language Teaching*, 6(8), 108-113.
- Fakher Ajabshir, Z. (2011). The effect of verbal and visual techniques on vocabulary achievement of Iranian EFL students. *The Iranian EFL Journal*, 7(5), 43-70.
- Fazeli, H. (2010). A modern approach to application of abbreviation and acronym strategy for vocabulary learning in second/foreign language learning procedure. *Language in India*, 10, 407-418.
- Gilbreth, J., & Taghva, K. (1999). Recognizing acronyms and their definitions. *International Journal on Document Analysis and Recognition*, 1(4), 191-198.

- Gruneberg, M., & Pascoe, K. (1996). The effectiveness of the keyword method for receptive and productive foreign vocabulary learning in the elderly. *Contemporary Educational Psychology, 21*, 102-109.
- Hock, H. S., & Noice, H. (1987). A word superiority effect with nonorthographic acronyms: Testing for unitized visual codes. *Perception & Psychophysics, 42*(5), 485-490.
- Izura, C., & Playfoot, D. (2012). A normative study of acronyms and acronym naming. *Behavior Research Methods, 44*(3), 1-95.
- Jafari, D. (2013). *General English language (2nd ed.)*. Payam Daneshgahi Publications.
- Kafipour, R., & Yazdi, M. (2014). A qualitative study of vocabulary learning strategies applied by Iranian undergraduate EFL learners in real learning setting. *English Language Teaching, 7*(7), 1-7.
- Lai, Y.C. (2013). Integrating vocabulary learning strategy instruction into EFL classrooms. *Taiwan Journal of TESOL, 10*(1), 37-76.
- Namaziandost, E., Rezvani, E., & Polemikou, A. (2020). The impacts of visual input enhancement, semantic input enhancement, and input flooding on L2 vocabulary among Iranian intermediate EFL learners. *Cogent Education, 7*(1), 1726606.
- Nemati, A. (2009). Memory vocabulary learning strategies and long-term retention. *International Journal of Vocational and Technical Education, 1*(2), 14-24.
- Nilforoushan, S. (2012). The effect of teaching vocabulary through semantic mapping on EFL learners' awareness of the affective dimensions of deep vocabulary knowledge. *English Language Teaching, 5*(10), 164-172.
- Rahimy, R., & Shams, K. (2012). An investigation of the effectiveness of vocabulary learning strategies on Iranian EFL learners' vocabulary test score. *International Education Studies, 5*(5), 141-152.
- Salehi, H. (2017). Effects of using instructional video games on teaching English vocabulary to Iranian pre-intermediate EFL learners. *International Journal of Learning and Change, 9*(2), 111-130.
- Salehi, H., & Jafarigohar, M. (2011). The effectiveness of mnemonic strategies in English vocabulary learning: A case of Iranian high school students. *The Iranian EFL Journal, 7*(5), 119-138.

- Siriganjanavong, V. (2013). The mnemonic keyword method: Effects on the vocabulary acquisition and retention. *English Language Teaching*, 6 (10), 1-10.
- Sozler, S. (2012). The effects of memory strategy training on vocabulary development of Austrian secondary school students. *Procedia-Social and Behavioral Sciences*, 46 (2012), 1348-1352. doi: 10.1016/j.sbspro.2012.05.300
- Yeates S. A. (1999). Automatic extraction of acronyms from text. *Proceedings of the Third New Zealand Computer Science Research Students' Conference*, p. 117-124.
- Zheng, L. (2010). Strategies in vocabulary learning and teaching. Unpublished master's thesis, Kristianstad University College, China.