VOCABULARY LEARNING STRATEGIES EMPLOYED BY IRANIAN EFL LEARNERS AND THEIR RELATIONS TO LISTENING PERFORMANCE

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ABSTRACT

This study aimed at: a) spotting the most frequent vocabulary learning strategies employed by Iranian EFL learners, b) identifying the most popular vocabulary learning strategy category used by Iranian EFL learners, c) explicating the relationships between vocabulary learning strategies and English listening performance, and d) investigating the relationships between vocabulary learning strategies and gender. Data was collected using a self-report questionnaire including 44 strategies comprising four categories—social, cognitive, metacognitive and memory-related strategies. The subjects included 96 IELTS candidates in a test center in Iran which were grouped according to their band scores in the IELTS Listening Module. Frequency of means, Cronbach alpha, Duncan and one-way ANOVA statistical procedures were applied and results indicated that memory-related vocabulary learning strategy category was the most common. Cognitively-demanding vocabulary learning strategies were found to be unpopular, whereas cognitively shallower ones were most popular which could be attributed to the rote-learning encouraging traditions of language learning in Iran as in most parts of the world. Findings were quite congruent with past studies supporting that strategy use appears to be culture-free. Also, the study rejected any significant relations between vocabulary learning strategy choices and listening performance.

KEYWORDS

Iranian EFL learners, vocabulary learning strategies, IELTS, listening performance, gender

INTRODUCTION

Lexical treasury is fundamental to language and significantly important for second language learners, yet lexis used to be traditionally pigeonholed in the field of Second Language Acquisition. However, in the past couple of decades, studies on vocabulary learning have taken off in L2 acquisition. A number of researchers have attempted to develop a classification scheme of language learning strategies (Cohen, 1998; Oxford, 1990; Wenden, 1978). Even though research on learning strategies is becoming increasingly popular, there is no unanimous
agreement on the definition of learning and learner strategies in the literature. Here, the definition of learning strategies is adopted from Oxford (1990, p. 8) as "specific actions taken by the learner to make learning easier, faster, more enjoyable, more self-directed, more effective, and more transferable to new situations". The use of a vast range of strategies has been taken to be a quality of successful learners as research supports; nevertheless, the majority of EFL learners seem to favor some form of mechanical strategies such as repetition over deeper, more complex ones, such as contextual guessing or metacognitive strategies (Gu & Johnson, 1996). This finding is disappointing in the light of the Depth-of-Processing hypothesis (Craik & Lockhart, 1972), which states that ‘deeper’ analysis of a stimulus (with ‘depth’ referring to a greater degree of semantic involvement) leads to better long-term memory retention.

Stoffer (1995) as one of the few focusing on vocabulary learning strategies developed a questionnaire which contained 53 items designed to measure specifically vocabulary learning strategies in the University of Alabama. The internal consistency and reliability coefficient of the developed questionnaire was 0.90. It was demonstrated that items on the questionnaire clustered into nine categories by factor analysis. The other researcher who investigated many strategies altogether was Schmitt (1997), who proposed his own taxonomy of vocabulary learning strategies. His scheme is somewhat different from Stoffer’s. He distinguished the strategies which learners use to determine the meaning of new words when they first encounter them from the ones they use to consolidate meanings when they encounter the words again. The former includes determination and social strategies, and the latter includes social, memory, cognitive, and metacognitive strategies. The social strategies are included in the two categories because they can be used for both purposes. This categorization is based, in part, on the Oxford’s (1990) classification scheme. Schmitt defined each strategy as follows. Determination strategies are used "when faced with discovering a new word's meaning without recourse to another person's expertise" (p. 205). Social strategies are used to understand a word "by asking someone who knows it" (p. 210). Memory strategies are "approaches which relate new materials to existing knowledge" (p. 205). The definition of cognitive strategies was adopted from Oxford (1990) as "manipulation or transformation of the target language by the learner" (p. 43). Finally, metacognitive strategies are defined as "a conscious overview of the learning process and making decisions about planning, monitoring, or evaluating the best ways to study" (p. 205). Although the definitions are quite clear, it is unclear whether the strategies classified into the five categories really share the common underlying factors. This is because factor analysis was not run as an indication of the validity of the questionnaire. Kudo (1999) adopted Schmitt’s instrument and modified that by taking advantage of the results of a pilot study. Then, factor analysis was run to validate the test. Kudo used that instrument to study Japanese students’ English vocabulary learning strategies. Considering that Kudo’s questionnaire was checked for both reliability and validity it was selected as the pertinent instrument in the study of Iranian Adult EFL learners’ vocabulary learning strategies. The following research questions were used to direct this study.

1. What vocabulary learning strategies are more popular with Iranian Adult EFL among memory-related, social, cognitive, and metacognitive strategies?
2. What individual vocabulary learning strategies do Iranian Adult EFL learners use?
3. Is there a significant relation between the Iranian Adult EFL learners’ choice of vocabulary learning strategies and their listening performance?
4. Is there a significant relation between the Iranian Adult EFL learners’ choice of vocabulary learning strategies and gender?

**METHOD**

**Participants**

After having invited almost one hundred students as a large enough sample size for such a quantitative study (Dörnyei, 2007, p. 99), based on a purposive sampling procedure (Babbie, 2001, p. 179), participation of ninety-six (thirty-six male and sixty female) IELTS candidates was benefited in this study after several times of administrations of the International Language Testing System tests by British Council in an off-site venue in Iran. For the purpose of this research, some of the candidates who in the IELTS listening module scored a Score Band 5, 6, or 7 were selected, and yet for further representativeness, the subject were limited to those in their twenties, or thirties regardless of gender.

IELTS defines a participant with Band 7 a good user as someone who has operational command of the language, though with occasional inaccuracies, inappropriacies and misunderstandings in some situations; they generally handle complex language well and understand detailed reasoning. A candidate scoring Band 6 is a competent user who has generally effective command of the language despite some inaccuracies, inappropriacies and misunderstandings; they are capable of using and understanding fairly complex language, particularly in familiar situations. It also defines a candidate scoring Band 5 as modest user who has partial command of the language, coping with overall meaning in most situations, though is likely to make many mistakes. They should be able to handle basic communication in their own fields (O'Connell, 2002, p. 7).

The reason these three bands were selected was that as for the real-world uses of the IELTS certificate for mostly all functions including, university admissions, job opportunities, immigration and so on a score band below five is of no use and above seven is quite rarely required; that range, as such, is the zone that practically is most critical for almost all IELTS candidates. Therefore, it was decided to opt for those levels of listening performance only.

**Instrumentation**

**IELTS Listening Module**

The Listening Module takes approximately 30 minutes. There are 40 items in four sections. The first two sections are concerned with social needs. There is a conversation between two speakers and then a monologue. The last two sections are concerned with situations related more closely to educational or training contexts. One mark is awarded for each correct answer in this forty item test. A Band Score conversion table is produced for each version of the Listening Module which translates scores out of 40 into the IELTS nine-band scale. Scores are reported as a whole band or a half band. Care should be taken when writing answers on the Answer Sheet as poor spelling and grammar are penalized (O'Connell, 2002, pp. 5-6).

**Vocabulary Learning Strategy Questionnaire**
A questionnaire developed and validated by Kudo (1999) was used to identify the vocabulary learning strategy choices. This questionnaire was originally based on a study by Schmitt (1997). The questionnaire consisted of two parts. The beginning section gained demographic information about the participants and the second part related to the strategies that the participants might use. The strategies are divided into four groups in each of which there are eleven strategies: social, memory-related, cognitive, and metacognitive. The definitions of these four strategies were assumed from Schmitt’s (ibid.). The questionnaire was translated into Persian so that probable misunderstandings due to the burden of the language would not hinder the students in revealing the actual techniques they use. Still, for further assurance, English key phrases of the original questions were also put in parentheses before the complete translation of the question items; at times, examples were used to facilitate the participants’ comprehension of the certain strategy in case that the techniques seemed like unfamiliar or the description of which seemed vague.

**Design**

In this study, there was no treatment or control over what had happened to the population. The learner’s strategy choice is regarded as (memory-related, social, cognitive, and metacognitive) the independent variable. Yet listening performance of the learners is considered as dependant variables in this research and gender as a moderator. Age (respondents only in their twenties or thirties), context of language (respondents who did not speak English as their native language or had no prior experience in English speaking communities), Persian as L1 (respondents who spoke Persian as their mother tongue)—these were the variables which were controlled in this research. As such an Ex post Facto Design was benefited in the study (Hatch & Farhady, 1982).

**Procedures**

To begin with, due to the translation of the questionnaire, to make sure of the consistency of translated test, the reliability of the test and each of the validated categories in the study was computed by Cronbach Alpha. Then, descriptively to figure out the popularity of the strategy categories as well as the frequency of the individual strategies the mean of the use of each category and each individual strategy was worked out to reach the answer for the first and second research questions. Later on, since the study also investigated whether there was a significant relationship between the strategy choice of adult Iranian EFL learners both with their listening performance and their gender, one-way ANOVA and Duncan statistical procedures were utilized to help realize the answer to the third and fourth research questions. To these ends, the SPSS software program was used to help with the computations.

**RESULTS**

**Data Collection**

To conduct the study with higher assurance, the researcher decided to benefit the result of an authentic IELTS examination rather than IELTS specimen tests available on market. In several administration of IELTS examination in a British Council venue, candidates with a listening Score Band 5, 6 or 7 were identified and invited to participate in the research. Having signed the
consent form, they were instructed by the researcher in person to respond to the questionnaire. Subjects were explained by providing examples how to answer to the questions concerning the strategies and the frequency of which they were used for learning vocabulary. The questionnaire type is a Likert Scale one with six options—never, seldom, occasionally, often, usually, and always. The participants were advised to ask questions if necessary and told not to discuss the answers with each other since the exploitation of strategies differ from person to person on an individual basis. The candidates who finished sooner than others were asked to pose any questions, make comments, or jot down any other strategies they used to improve on their lexicon if they are not listed in the questionnaire. This was mainly done to prevent them from possibly distracting the other respondents who were not through with the questionnaires yet.

Reliability

Initially, for the purpose of making sure of the consistency of the questionnaire after being translated into Persian, the reliability of the questionnaire was computed by using Cronbach Alpha procedure and the reliability coefficient (alpha=0.88) turned out to be pretty close to 1.0, and as such quite acceptable (De Vaus, 2002). Furthermore, the computations proved that no single deletion of any of the question items would contribute to a higher consistency in the questionnaire.

Descriptive Data Analysis

To answer the first two research questions, the descriptive statistics of the results were obtained. The average mean for the category of social strategies was 23.75, memory-related strategies 40.59, cognitive strategies 34.42, and metacognitive strategies 32.29. The means were fairly low assuming a possible total score of 66 for each category. The reason why those were rather low probably might be owing to the perception of the students who did not use them or used them quite rarely. In fact some of the students made comments that they were not aware that so many strategies were to choose from to learning vocabulary.

Subsequently it was found that the category of memory-related vocabulary learning strategies with the highest mean of 40.59 was the most popular group of strategies for the participants to learn new words. Afterwards, the cognitive and metacognitive strategies with means of 34.42 and 32.29 were in the second and third places, respectively. Moreover, with 23.75 mean arrived at for the social category, it was revealed that that category was least used among the four categories in question.

A closer look at the four categories and the individual strategies yielded interesting observations. The average score of the social strategies was way lower than those of other strategies. The average score of many of the individual social strategies fell under 2.00. Even two of the highest means were 2.65 and 2.38 which denoted they were not even occasionally used. The least commonly used strategy in the social strategies was 1.46 which means that it was used quite rarely by the learners. Nevertheless, there we had SOC4 with the highest mean of 3.14. That strategy which was group work in classroom seemed like to be the only social strategy that enjoyed an occasional use on the part of the students.
In contrast, all the means of all the individual memory-related strategies were above 3.01; besides, MEM8 scored 4.48 and proved the most popular one among all other strategies. Connecting word to already known words, Imagining word’s meaning, doing verbal repetition—those were individual strategies with means of higher than 4 and were the three most popular in the memory-related category. The average use of the total of the memory-related strategies is 3.69 which represented almost often use of such learning strategies among the subjects.

A similar argument held true for the cognitive strategies. All the individual strategies’ means were way above 2.0 and the average of the category was 3.1 which denoted an occasional use of the category and made it the second most common class of strategies among the participants. In addition COG6, using English-language Internet, with a mean of 4.28 made the second most popular strategy to improve vocabulary among all the strategies in the questionnaire. Using an English-language TV program, using an English language video, using the vocabulary section in high school text books, listen to English-language radio programs, and using a bilingual dictionary—they were the individual cognitive techniques that had means above there and were employed relatively often.

The means of metacognitive strategies were in the middle of the three other strategy categories. One of the strategies scored below 2.00 and the average of the category was 2.9 which made metacognitive types a rare option for learners. Nevertheless, interestingly MET2, guess from the textual context in reading, enjoys a popularity of 4.27 which is the third most common among all. Apart from MET2, paraphrase the word’s meaning by oneself, learn words written on commercial items, using new word in sentences were also the metacognitive options which students opted for and were rated all three of them above 3, namely, occasionally.

One-way ANOVA and Duncan Tests

To answer the two final questions, one-way ANOVA and Duncan tests were utilized. To begin with, the population according to sex and listening performance was grouped into six, Male 5, Male 6, Male 7, Female 5, Female 6, and Female 7. Subsequently, ANOVA for the existing four vocabulary learning strategy categories in each and every group was computed. It was intended to explore whether a link between these groups with the strategy use could be recognized.

ANOVA for the four strategy categories among the male subjects with score band of 5 in their IELTS listening was computed. There was 3 df’s for categories and 8 df’s for the strategy use in the Male 5 category (4*3-4=8), so we returned to the F-distribution table (Hatch & Farhady, 1982) for the intersection of 3/8. We found that we needed 7.59 for a 0.5 level of probability, and therefore, it revealed that since the F-ratio achieved 1.813 was much smaller than 7.59, the strategy use among the participants in this group did not follow a consistent pattern, meaning it was safe to assume that the male group scoring 5 had no preference or priority in the use of any of the four strategy categories. Furthermore, Duncan test provided no more than one subset for the male 5 and discloses that no strategy category outweigh the other and confirms the ANOVA result.

However, according to the one-way ANOVA computed for male participants with score band 6 in their listening, seeking the intersection of 3 as the numerator and 36 as the denominator in the
F-distribution table, we found that with the level of probability of 0.5 in mind, the ratio of 8.4 was needed, yet our ratio was much greater, namely 5.745. So, we had to conclude that there was a meaningful difference in the employment of the strategies by the male 6 and further it was clarified via the test of Duncan that social strategies were least favored by the that group. Still as for the rest of other categories, memory-related, cognitive, and metacognitive, none outweigh the others.

As for the male participants scoring a high of band 7, a one-way ANOVA was calculated in which the F-ration was 29.263. Later as seeking the 3/88 intersection in the F-distribution table, the ratio of 3.98 at 0.5 probability level was attained. Accordingly, since our F-ratio is way greater than 3.98, we presumed that there we had a quite significant difference in terms of the utility of the vocabulary learning strategies in that given group in the population, and subsequently benefiting the results in the Duncan test, it was understood that that group made use of the social strategies for learning vocabulary least often. Nonetheless, they seemed to prefer to employ the memory-related strategies most often, more than cognitive and metacognitive both of which enjoy a similar frequency of use.

Similarly, according to the results in ANOVA for the female scoring 5 in the listening test, the F-ratio attained was greater than the 3/88 intersection in the F-distribution table which was 3.98 at 0.5 probability level; therefore, it was understood that in the given group of subjects there we had a significant, meaningful dissimilarity in the exploitation of the strategies. To learn what those preferences were, the Duncan test was run and it illustrated that the social and memory-related strategy categories were referred to with different frequency compared with the two other categories. The former was the least and the latter was the most popular among those subjects, the female 5. Still, they employ cognitive and metacognitive strategies as their second preference more or less equally.

Based on the F-ratio computed in ANOVA for the class of women who scored band 6 in their IELTS listening, it was presumed that there was no similarity in the use of vocabulary learning in terms of the four distinguished strategies among those participants. It was so because the intersection of 3 over 52 with level of probability of 0.5 in the percentage points for the distribution of F was 4.16 which was way smaller than 18.364. The Duncan test helped clarify that mostly similar to previous groups, women with band 6 in IELTS would rather benefit Memory-related strategies first and foremost. Nevertheless, they resorted to cognitive and metacognitive lexical learning strategies. Nevertheless, they did not favor social strategies of vocabulary learning strategies very much and that was least employed among the other three.

To study the preference of the group of women scoring the high of band 7 had any particular preference in using vocabulary learning strategies, one-way ANOVA was run and resulted in an F-ratio of 17.619. Having consulted the F-distribution table, the researcher found 3, the numerator of F, and 88, the denominator, intersecting at 3.98 which was by far smaller than our F-ration and signified that there existed a meaningful dissimilarity in terms of the choice of strategies in that certain group. Duncan test classified the results into three. Social vocabulary learning strategy category was delineated as the least attended by the female population with the score of band 7. The second group included metacognitive and cognitive categories which were brought into play more than the first class, and at the top; there was the third group, which is the
memory-related strategy category as the most exploited and favored vocabulary learning approach.

Thus, as noted thus far except for the groups of the male with the score of band 5 and 6, all other groups most commonly benefited the memory-related strategy group; on the other hand, apart from group Male 5 the least popular strategies for Iranian, adult EFL learners seemed to be the social ones. And the little difference as for the group of the male 5 could have to do with too small number of the subjects assigned to that group which is no more than 3. Moreover, the results gained later was still absolutely congruent with previously obtained outcomes when it was decided to observe the results from the choice of the strategy use of the whole population when the variables of sex and the listening performance of the students were deleted. We noticed that the $f$-ratio for the 3/380 in the table of critical $F$-distribution was 3.83, which was way smaller than our $F$-ratio which was 86.379 and quite harmoniously confirmed that there we had a difference concerning the strategy choice of the entire population in the study. Later the results from the Duncan test along with all of the other results allowed us to safely reject the null hypothesis for the RQ1, which declared that for Iranian, adult EFL learners had no reference, yet for them the most popular strategy for learning English vocabulary was memory-related strategies.

As well, with above calculations, the response for RQ3 seemed to be provided. The results from ANOVA for each of the six groups which based on listening performance and sex were formed showed that except for the male 5 in all other groups, it was witnessed that the same strategies were most popular and even the least preferred category was the same in all groups. The dissimilarity of the result in group male 5 also could be justified on the grounds that the number of subjects in that group was too few to count on; however as can be seen later by running ANOVA for the four categories among male once and once for female subjects disregarding their performance in listening, it was realized that sex was no influence in the choice of learning strategy option of subjects and in female 5 we had the memory-related strategy as the most favorite and the social ones as least common, the results of which could be extended for all subjects with IELTS listening score band 5. As such, the researcher could conclude according to the identical choices of all the six groups, there was no significant relationship between the level of listening performance of the subjects and the strategies they use to learn L2 vocabulary.

Likewise, as formerly referred to, it was noted that that the same results were precisely reached when ANOVA was run separately once for the male and once for the female subjects in the study and with $F$-ratios achieved for male and female, 36.439 and 51.583 respectively, we could judge that according to the critical $F$'s in the table of $F$-ration distribution along with the results reached so far both for male and female Iranian, adult, EFL learners the memory-related strategies seemed like to be the best known and most popular for improving on their lexicon; besides, both male and female subjects preferred the social L2 vocabulary learning strategies as the last option.

**DISCUSSION**

As for the first research question, evidence was provided that memory-related strategy category was the most preferred and social strategies the least employed among the four categories in
question. As for the second research question, it was found out that the subjects did prefer some individual strategies over some others by far. It was established by the results that MEM8 (imagining the meaning of the word) scored 4.48 and proved the most popular one among all other strategies. In addition COG6 (using English-language Internet material) with a mean of 4.28 made the second most popular strategy to improve vocabulary among all the strategies in the questionnaire. Interestingly enough, MET2 (guessing from the textual context in reading, enjoys a popularity of 4.27 which is the third most common among all. The fourth and fifth most popular individual strategies with usage at often times were MEM11 (doing verbal repetition) and MEM4 (connecting the word to already known words) with means of 4.21 and 4.14, respectively. In accordance with results, there was no significant relationship between the adult, EFL learners’ choice of vocabulary learning strategies and their listening performance. Besides, the results of the study helped confirm that there was no significant relationship between gender and choice of vocabulary learning strategies of Iranian adult EFL learners.

CONCLUSION

Many findings of the questionnaire turned out to be congruent with past studies and findings (Kudo, 1999; Oxford, 1990; Schmitt, 1997). The strategies mostly used were rote learning and the strategies less commonly employed were those engaging deeper cognitive processing, such as the key-word method, semantic mapping. As Schmitt (1997) argued, the latter strategies were cognitively so demanding that most students could not use them. Despite the very fact that the population was limited to young adults who had or were doing degrees in higher education, probably due to the phenomenon that historically rote-learning has been encouraged in learning a language whether as a native, second, and/or foreign language; it is, therefore, commonly used. Moreover, although some researchers including O'Malley and Chamot (1990) argue that strategies may be culture specific, this research taking sides with Kudo’s (1999) which empirically provided evidence that this may not necessarily hold true considering the fact that Oxford (1990) based her research in Alabama, while that of Kudo (1999) was in Japan, and this study was conducted in Iran—quite different cultures, yet similar results. Therefore, the results of this study suggest that learning strategies may be commonly exploited by learners at least in Japan, Alabama and Iran, rather than being culture specific. Further research may investigate this issue in further depth.

In terms of listening, we arrived at the fact that students while improving their listening performance do not undertake any changes in the choices they make about vocabulary strategy options. As such, it sounds that the promoting reason or reasons of success which contribute to this achievement might be some other factors which could be the listening strategies from which higher-achievers benefit from. Yet broader exposure to authentic listening material according to past studies might play an influential role in this achievement.

IMPLICATIONS

Certain curricular and pedagogical concepts and implications can be derived from this research. This study suggests that students should be exposed to many strategies. As stated above, some of the EFL learners participating made comments that they did not know that there are so many different strategies to learn vocabulary items. Moreover, they said that they planned to try some
that found in the questionnaire and looked interesting, but that they had never thought of before. If students can find strategies suitable to them and actually use them, this might increase their lexical treasury.

It was found that Iranian, adult EFL learners used many various strategies to learn vocabulary; however, it was understood that they did not or hardly ever benefited any others such as semantic mapping or the Key Word method. It is pretty probable that those unfamiliar or meagerly familiar strategies may be accommodating with their vocabulary learning. Likewise, unlike a few other researchers as Schmitt (1997) and Kudo (1999) argued, such cognitively challenging strategies lead to higher retention in memory than do the cognitively shallower activities such as verbal repetition. Hence, English teachers might want to introduce such potentially effective techniques to their students and encourage them to try these strategies out. The goal of doing these things is hoped to be enhancing the learners’ independence and autonomy; ultimately, students would benefit most by learning independently of their teachers as Cohen (1998) suggests among others. To begin with, it is important to have students identify what strategies they actually use. If students are not aware of what they are doing, students and their teachers cannot improve learning. The questionnaire in Persian used in this study proved useful for diagnostic purposes for identification of what strategies students use and do not use. To do this, the students seriously need to reflect on their learning. Once they identify what they do and do not, teachers can help them choose and explore strategies that seem suitable and self-direct their learning. Often, this is a cyclical process; if the strategies that they chose work for them, they are set; if not they can try something else. At this stage, teachers play an important role; they might conference with their students, introduce new strategies and step back and see how it is working. This requires continued effort to investigate strategies by themselves or consult with other specialists. And finally, despite the fact that there appears to be a consensus on the usefulness of teaching strategies by theoreticians, too few models of training vocabulary strategies have been proposed (Takač, 2008, p. 77); as such efforts and research on this case would definitely prove accommodating for EFL learners in Iran and anywhere else for that matter.

REFERENCES


