

# **Comparative Analysis of Vocabulary Learning Strategies in Learning English as a Foreign Language among Freshmen and Senior Medical Sciences Students Across Different Fields of Study**

**MARYAM HADAVI**

*Rafsanjan University of Medical Sciences, Iran*

**&**

**ZAHRA HASHEMI\***

*Rafsanjan University of Medical Sciences, Iran*

## **ABSTRACT**

Learning strategies play an important role in the development of language skills. Vocabulary learning strategies, regarded as the backbone of these strategies, have become a major part of English language teaching. This study aims to compare use and preference of Vocabulary Learning Strategies (VLS) among freshmen and senior EFL medical sciences students across different fields of study. 449 students participated in the study, of which 64.6% were female and 35.4% were male. The instrument utilized in this research was a questionnaire consisting of 41 items related to the students' approach to vocabulary learning. The items were classified under eight sections as dictionary strategies, guessing strategies, study preferences, memory strategies, autonomy, note-taking strategies, selective attention, and social strategies. The results indicated that freshmen students, particularly students majoring in surgical technology used memorisation technique followed by dictionary use and note taking strategies more than the senior students. In particular, male students were more autonomous while female students preferred to use social strategies. Overall, guessing and dictionary strategies were the most frequently used strategies among all the learners ( $p=0.000$ ). Based on the results, which indicated more strategy use by the freshmen students, it is recommended that language teachers recognize the different needs of the students at different levels, and adjust teaching and learning procedures accordingly.

**KEYWORDS: Vocabulary Learning Strategies (VLS), medical sciences, freshmen students**

\* Corresponding author

## Introduction

Vocabulary Learning Strategies (VLS) have been proven to be positively correlated to language acquisition (Schmitt, 1997). As vocabulary is considered the most pressing need for people learning foreign languages, vocabulary studies have in the past decade dominated the subject of L2 acquisition (Laufer & Sim, 1985). Fan (2003) has reported that VLS instruction in the language classes is largely incidental. Nation (2001) believes that a large amount of vocabulary could be acquired with the help of vocabulary learning strategies and that the strategies prove useful for students of different language levels. Vocabulary learning is not an easy task; it has been argued that learning vocabulary is the greatest source of problem experienced by L2 learners, and many learners face problems in the use of language because of inadequate vocabulary (Savadkouhi, 2013). Vocabulary is vital to any language and is highly significant to typical language learners. Without adequate vocabulary, learners may not be able to communicate effectively, and that could result in passive and incapable learners. VLS is considered as a salient component of general learning strategies in L2 acquisition (Oxford, 1990; Ruutemets, 2005). Nation (2001) has emphasized that with the help of VLS, a wide range of vocabulary can be acquired.

Iranian university students tend to have good knowledge of the most frequently used words and usually, are basically proficient in all the fundamental grammatical rules because they study English extensively to pass the national university entrance examination required for university entrance. As an important part of the university entrance examinations, learning English helps the aspiring university students gain acceptance into good universities and study highly regarded courses. Therefore, instructors are forced to educate students in a manner which will prove most useful to them, which is based on grammar translation method. Iranian students are therefore very restricted in using English in real life contexts, and study English mostly for examination purposes. Basically, it seems that the driving force and motivating factors behind learning English are for passing such university exams. Therefore, Iranian students usually learn vocabulary through teachers' help, reading in the classroom or making use of a dictionary. Yu-jing (2010) has pointed out that many students turn to the dictionary whenever they meet an unknown word in their reading and "excessive use of dictionaries may destroy the fluency of the reading process." A great number of Iranian university students are unaware that they could utilize strategies to make vocabulary learning easier for themselves. Occasionally, they may rely on their own meta-cognitive abilities to guess the meaning of words or take responsibility for their own learning. This form of learning has resulted in passive students who are incompetent language learners and mostly rely on their teachers or dictionary to learn vocabulary.

Numerous studies have found that there is a significant relationship between students' language learning strategies and language proficiency. Learning strategies have been defined by Oxford (1994, 231-243) as "specific actions, behaviours, steps, or techniques students use, often consciously, to improve their progress in apprehending, internalizing, and using the L2". Cohen (2007) believes that language learning strategies are conscious mental activities that must include an action, a goal and a learning situation. So, the term

'strategy' implies some degree of consciousness on the learner's part and if foreign language students are equipped with such strategies, for example, vocabulary learning strategies, they can be more successful language learners because vocabulary learning strategies can develop the autonomy of the students by allowing self-directed involvement, help them gain control of their learning (Azimi Mohamad Abadi & Baradaran, 2013; Oxford, 1990). Autonomous learners can then take control and develop responsibility for their own learning. As Nation (2001) points out, by autonomy we do not necessarily mean students who study alone, as most students and teachers believe, it means that they choose strategies to help them learn vocabulary in a sustainable way.

When teaching strategies to the students, factors such as age, motivation, proficiency, and field of study usually come into play. Language learning experience, culture and needs of the students must be taken into account. This study compares the VLS among the freshmen and senior EFL medical sciences students across different fields of study. As learning strategies highly depend on individual needs and preferences (Yu-jing (2010), a uniform way of teaching and using strategy is not suitable for all students and could impede the learning process. Therefore, this study was designed to compare the VLS use and preference among EFL freshmen and senior medical sciences students with different majors in order to teach and help these students in developing strategies that would be useful inside and outside the classroom.

### **Significance of the Study**

Exploring the VSL use of the medical students at Rafsanjan University of Medical Sciences can reveal individual differences in vocabulary learning among students, and encourage EFL teachers and curriculum developers to design materials and activities which would help the learners improve their vocabulary learning. Also, it would permit EFL educators and curriculum planners to match teaching and learning to improve learners' potential. As for students, exposure to different strategies could be a valuable tool in helping them become autonomous learners.

### **Objectives and research questions**

Based on the above mentioned studies, this study attempts to identify which vocabulary learning strategies are used by Iranian EFL medical sciences students and further identify possible relationships between gender, different fields of study, language learning experience, year of study and language learners' use of VLS in vocabulary learning. Thus, this study attempts to address the following questions:

- 1) Which VLS strategies are used by senior students?
- 2) Which VLS strategies are used by freshmen students?
- 3) Is there a significant relationship between the Iranian learners' field of study and their use of VLS?

## Methods

In this descriptive cross sectional study, the participants comprised 449 students majoring in different subjects and from diverse backgrounds at Rafsanjan University of Medical Sciences (RUMS). The instrument utilized in this research was one employed by Jones (2006) which was adopted from other researchers (Fan, 2003; Gu & Johnson, 1996; Nation, 2001; O'Malley & Chamot, 1990; Oxford, 1990; Schmitt, 2000) consisting of 41 items related to the students' approach to vocabulary learning, and four questions related to their history of studying English, the percentage of English exam obtained in the National Higher Education Entrance Examination (NHEEE) to see the level of their English proficiency (In Iran, any student who wishes to enter university after high school must take part in the competitive NHEEE and then be ranked compared to all other test takers; the better the ranking, the higher the probability of entering the university and the field of their choice). There was also a question regarding the use of English programmes on television or satellite to see if they use any strategies related to affective strategies including taking risks and encouraging themselves to learn new vocabulary through media, and an open ended item at the end of the questionnaire where they could give suggestions to the teachers and other students.

The Instrument used in this study was the one employed and developed by Gu and Johnson (1996), and replicated from a similar study by Seddigh and Shokrpour (2012). The questionnaire consisted of 41 items related to the students' approach to vocabulary learning (see Appendix 1). The items were classified under eight sections as dictionary strategies (seven items, 28 scores), guessing strategies (three items, 12 scores), study preferences (three items, 12 scores) memory strategies (14 items, 56 scores), autonomy (five items, 20 scores), note-taking strategies (six items, 24 scores), selective attention (three items, 12 scores), and social strategies (four items, 16 scores). Each item was given a score of 4. The participants were asked to answer each item with a 5-point Likert-style frequency scale as follows :0) I never or almost never do this, 1) I don't usually do this, 2) I sometimes do this, 3) I usually do this and 4) I always or almost always do this. The total scores would be calculated from 0 to 180. So, for example if a student ticked one item as "I don't usually do this," he would get a score of 1 for that item. At first all the items in the questionnaire were translated from English into Persian and independently back translated into English by a second translator. The few discrepancies between the original English and the back translated version resulted in adjustments in the Persian translation based on direct discussion between the translators. The collected data were analysed using SPSS, version 10. Descriptive statistics were applied to explore the participants' vocabulary strategy use. For each item on the survey, the frequencies of the responses were calculated in percentages. Also, the means and standard deviations were determined for the 41 strategies listed in the questionnaire. ANOVA was carried out to see whether the differences among the mean percentage scores of the eight strategies are statistically significant or not. *p* values of less than 0.05 were considered significant. Descriptive and inferential statistics were employed to analyse the data according to gender. For descriptive statistics, the sample was filtered according to gender and then the percentage scores were calculated so that the males' and females' responses could be compared for each item. The inferential statistics formulated a composite scale from the

item responses so that the males and females could be compared according to strategy category (as against just comparing based on individual items). There were 41 items on the questionnaire and as each item constituted less than one minute to answer, the students were given 30 minutes to answer the questions. If the students required more time to complete the questionnaire, they were given extra time. Thus, adequate allowances were given and the researchers were present to answer any questions or resolve any ambiguities.

## Results

The students from all different fields of medical sciences participated in this study. A total of 19.8% of the participants were medical students, 12.3% dentistry, 17.5% anaesthesiology, 10.7% medical laboratory, 13.6% midwifery, 6.6% surgical technology, and 13% radiology. 9.8% were nursing students. Table 1 reveals the mean and standard deviation of using VLS strategies according to the field of study.

**Table 1. The use of strategies according to the field of study**

Field \ Strategy	Social	Selective attention	Note taking	Autonomy	Learning	Memory	Guessing	Dictionary use
Medicine	9.70±3.20	7.46±2.31	11.58±4.13	8.40±4.07	6.72±1.77	31.42±6.88	7.53±2.41	16.48±4.10
Dentistry	8.39±2.75	6.37±2.30	10.44±3.72	8.94±3.88	6.75±1.42	29.21±6.91	6.55±2.31	15.33±4.21
Anaesthesiology	8.72±2.80	5.56±2.47	9.32±5.68	6.79±4.16	6.40±2.03	28.32±8.51	6.08±2.69	14.42±5.24
Surgical technology	9.41±2.95	7.00±1.86	11.76±5.61	6.92±4.55	6.70±1.91	31.96±8.85	6.75±2.55	15.07±4.31
Medical laboratory	8.70±2.64	6.72±2.76	9.96±5.10	7.45±4.67	6.30±2.52	29.09±8.57	6.45±3.02	14.38±5.38
Midwifery	8.95±2.88	6.63±2.87	10.77±5.55	6.07±3.74	6.03±1.89	31.21±8.94	7.02±2.49	13.13±4.40
Radiology	9.89±2.81	6.45±2.78	10.89±4.65	7.94±4.23	6.87±1.44	31.36±6.99	6.61±2.45	15.72±4.31
Nursing	8.50±3.38	6.14±2.85	8.51±5.67	6.08±3.69	5.72±1.97	27.73±9.50	6.37±3.02	12.16±4.69
P value	*0.005	*0.003	*0.004	*0.027	*0.006	*0.039	0.055	*0.000

One-Way ANOVA

On the whole, 449 students participated in this study out of which 52.5% (n=236) were freshmen and 47.5% (n=213) were senior students and 64.6% (n=290) were females and 35.4% (n=159) were male students. 69.6% (164) of the freshmen were female and 30.4% (72) were male students. For the senior students this number was 57.3% (122) and 42.7% (91) respectively. The fisher exact test indicated a statistically significant difference in respect to the gender among freshmen and senior students ( $P < 0.05$ ).

A comparison of the freshmen and seniors revealed that the freshmen used more strategies and this difference was statistically significant ( $t(425) = 4.140, p < 0.05$ ). Overall, female students (92.5±22.85) incorporated more strategies than the male students (88.85±25.10). Table 2 shows the mean and standard deviation of the use of the VLS based on gender.

**Table 2. The mean and standard deviation of the use of VLS according to gender**

Strategy Gender	Social	Selective attention	Note taking	Autonomy	Learning	Memory	Guessing	Dictionary use
Male	8.36±3.08	6.51±2.66	9.89±4.75	8.44±4.16	6.26±2.07	28.20±8.41	6.58±2.78	14.44±4.92
Female	9.39±2.82	6.50±2.59	10.63±5.20	6.86±4.12	6.54±1.80	30.90±8.10	6.74±2.55	14.80±4.67
P value	*0.010	0.619	0.807	*0.003	0.296	0.309	0.293	0.999

\*p&lt;0.05

Table 3 reveals that besides the autonomy and study preference strategy in all the rest of the items, first year students benefited more from using different strategies. Dictionary and note taking were the most frequently used strategies among both male and female students. However, application of memory strategy which included the following items (see Appendix 1) was the most common strategy used by these students:

\*I keep a record of new words I see (for example, in vocabulary lists, in vocabulary notebooks, on vocabulary cards)

\*Outside of class time, I regularly review new words that I have recently seen.

\*I repeat words aloud to help me remember them.

\*I write words several times to help me remember them.

\*I remember words together that have similar spellings.

\*I remember words by creating mental pictures of them in my mind.

\*I remember words together that sound similar.

\*To help me remember words. I pay attention to the word's prefixes, roots, and suffixes (for example, pre-re, tion- sion).

\*I remember words buy grouping them together according to subject (for example, remembering names of animals together, remembering name of countries together remembering name of foods together).

\*I remember words by remembering the sentence I which I saw them or the context in which I saw them.

\*I remember words by testing myself (for example, by looking at the English words and trying to remember the Persian word and trying to remember English translation.)

**Table 3. The mean and standard division of the use of the strategies among the freshman and seniors**

Strategy Level	Social	Selective attention	Note taking	Autonomy	Learning	Memory	Guessing	Dictionary use
Senior	8.44±2.71	6.01±2.68	9.07±4.64	7.33±4.40	6.41±1.86	28.03±7.20	6.36±2.51	14.35±4.62
Junior	9.61±3.04	7.00±2.37	11.52±5.09	7.59±3.99	6.49±1.91	31.82±8.37	6.95±2.71	15.06±4.85
P value	*0.000	*0.000	*0.000	0.26	0.221	*0.000	*0.004	*0.033

\* $p < 0.05$

The preferred strategies for both male and female students were memory, dictionary use, and note taking respectively. The mean and standard deviation indicated a statistical significant difference for the autonomy and social strategies. The male students used Autonomy more than the female students while the female students preferred social strategies. Comparing the freshmen and seniors revealed that the freshmen used more strategies; this difference was statistically significant ( $p < 0.05$ ).

It is noteworthy to mention that 44.2% of these students had previously attended private English classes outside the school or university, and these same students used more strategies compared to the students who had not had any history of attending classes. The mean and standard deviation of using strategies between these two groups were  $98.64 \pm 22.17$  and  $85.52 \pm 23.21$  respectively, and the t-test revealed a significant statistical difference between the two groups ( $p < 0.05$ ). The students who indicated having had history of attending private English language classes used more social, guessing and selective attention strategies, whereas the students who only attended high school or university classes used social, selective attention and memory strategies. 19.8% of the students watched or used English language programmes on television or satellite TV, but 80.2% of them did not use any English media and basically did not watch any English programmes on television. The mean and standard deviation of using the VLS strategies for the first group who watched English programmes on TV was  $103.48 \pm 21.3$  and for the second group was  $88.36 \pm 23.28$ . Thus, this difference was statistically significant ( $p < 0.05$ ).

## Discussion

The results indicate that learning the English vocabulary is important to the students. However, in Iran, lack of vocabulary proficiency, among other limiting factors has led to the production of learners who are passive and incapable language users who can have communication problems even at high levels of language proficiency (Boroujeni & Koosha, 2013). There are many strategies for learning a language and vocabulary learning strategies (VLS) are considered as a key aspect in learning a language. VLSs are considered to be powerful tools for learning because without them communication cannot happen in a meaningful way. According to Hsiao and Oxford (2002), unfortunately, not many students are aware of the power of consciously using them to make learning quicker and more effective. Fan (2003) has reported that VLS instruction in the language classes is largely incidental. The aim of the present study was to compare the usage and preference of VLS among the first year (freshmen) and final year (senior) students at Rafsanjan University of Medical Sciences.

Memory and note taking strategies help the students to save information and use it when needed. But these strategies are not very acceptable because memorization, repetition and note taking are considered shallow strategies (Mokhtar, Rawian, Yahaya & Abdullah, 2007). Deeper strategies require significant active manipulation such as imagery, differencing and key word method (Schmitt, 2007). Schmitt believes that these strategies are preferred by intermediate or advanced learners. Studies (Cohen & Aphek, 1981, Hulstijn, 1997) have also shown that in the long run these strategies enhance retention better than rote memorization.

The participants in this study were either unaware of the effect of these strategies or simply did not put any effort into using them. Our results are in line with Mokhtar et al. (2007) who found that Malaysian students also preferred using dictionary strategies for comprehending vocabulary. While the dictionary is a helpful tool for learning, it can be problematic as Scholfield (1997) claims that they are used mainly to confirm the meaning of particularly known words.

The results indicated that the mean of Vocabulary learning strategies in the first year university students was higher than the senior students, which was statistically significant ( $p < 0.001$ ). This could be attributed to the improvement in the ELT methods in the schools, and use of the learning strategies by the students. The comparison of the mean and standard deviation of the 8 strategies in this study indicated a statistically significant difference between the students in using all the strategies except autonomy and learning style. The students in this study were not aware or willing to use social strategies which are consistent with other studies such as Zarafshan (2002), and Seddigh and Shokrpour (2009). This could be due to the approach in educational settings in the university which does not practice communication methods in the classrooms.

Although there was no statistically significant difference between the two groups in attending private English classes before entering the university, freshmen seemed to be more aware of using a wider range of strategies. The factors that indicate effective VLS use and preference which were analysed and compared between the two groups of seniors and freshmen at Rafsanjan University of Medical Sciences are examined and discussed in the following section.

### ***Freshmen vs. seniors***

In this study, freshmen students used more strategies in order to learn vocabulary, compared to the senior students. This is in line with the studies of Doczi (2011) and Mongkol (2008). Doczi found that as the level of study improved among her Hungarian ESL students, the use of vocabulary strategies decreased. Also, Mongkol's findings revealed that the first year Thai university students tended to use more VLSs when learning new words by paraphrasing the word's meaning and remembering parts of speech. The results of other studies indicate that language proficiency has direct correlation with the use of VLS. Nemati (2008), Chang Tsai and Chang (2009), Celik and Toptas (2010) have all reported that VLS use positively correlates with language



proficiency level, however, it must be considered that in these studies, the students with different proficiency levels had employed different types of VLS.

### ***Gender***

Gender seems to be an inconclusive factor in the use of VLS. Some researchers believe that the use of VLS is more prevalent in female students (Catalan, 2003; Marttinenn, 2008; Seddigh & Shokrpour, 2012) while others have indicated that gender had no significant difference on their students' use of VLS (Arjomand 2011; Khatib & Hassanzadeh 2011). In the present study, female students used dictionary, memory, study preference, note taking and social strategies more than the male students, although this difference was not statistically significant. Male students used autonomy strategies significantly more than the female students ( $p < 0.05$ ), while the female students reported using social strategies more ( $p < 0.05$ ). Social strategies have an indirect impact on language learning, and besides having contact with native speakers, social strategies also include aspects such as asking the teacher, getting feedback and correction from the teacher and interacting with native speakers. Unfortunately, in the past two decades, due to various social and political reasons, Iranian EFL learners have had little or no contact with native speakers of English.

### ***Field of study***

There is much evidence in support of the relationship between learner's field of study and their VLS use. Mingsakoon (2002) reported that science students use and incorporate VLS differently from arts students. Also, other studies have revealed that English and non-English major students use different VLSs. In Bernardo and Gonzales' study (2009), the use of some VLS such as social strategies was significantly different among science and allied medical science students in comparison to liberal arts, Education and engineering students. As was mentioned before in this study, surgical technology students used dictionary, guessing, memory, and note taking strategies more than the other majors, so it is possible to conclude that different fields of study might incorporate different styles of learning vocabulary, and as Boonkongsaen (2012) explains, students learning in different fields of study are likely to use different elements of VLS that suit their learning style and course. In her study, students who studied in regular and morning courses reported higher use of VLSs compared to other students who attended evening classes. Accordingly, she believes that language teachers should seriously consider course types when introducing the VLS to the students.

### ***Language learning experience***

44.2% of the students in this study had participated in private language teaching classes prior to entering the university. The students who indicated having had history of attending private English language classes used more social, guessing and selective attention strategies, whereas the students who only attended high school or university classes used social, selective attention and memory strategies respectively. Some studies have reported that language learning experience has a positive effect on VLS use. Siriwan

(2007) who examined Thai students' VLS use and their language learning experience reported that the more experienced students made more use of VLS compared to the less experienced ones. Mongkol (2008) compared first and second year Thai EFL university students' use of VLS and found out that second year students tended to use VLS to analyse affixes and roots to understand the meaning of words more as compared to the first year students. The results of the current study also reached the same outcomes: freshmen students profited from VLS by using new words and remembering parts of speech or paraphrasing the word's meaning. Their overall scores in the Dictionary use was  $15.06 \pm 4.85$  compared to  $14.35 \pm 4.62$  for the senior students.

### **Limitations of the study**

In this study, freshmen students indicated using more strategies particularly memory, note-taking and dictionary strategies compared to the seniors, although it would be expected that seniors having more experience in learning the language and a longer history in language might use more strategies. This difference could be because freshmen students are new to university and tend to feel more responsible in answering the items and perhaps revealed more true desires while the seniors might have been hastier in choosing the items. Therefore, the results should be interpreted with caution and more research should be conducted to investigate the differences in strategy use among the first and final year students.

### **Conclusion**

One way to help learners to enhance their knowledge of L2 vocabulary is through equipping them with a variety of vocabulary learning strategies. The results of this study indicated that generally, freshmen were more prone to use vocabulary learning strategies. In addition, students with different majors preferred and incorporated different strategies, so when teaching vocabulary to students, among other factors, aspects such as gender, field of study and proficiency level should be taken into consideration.

Among the eight strategies analysed, only guessing and dictionary use were preferred by all the respondents, which are not sufficient in light of variety of learning strategies. More training should be done with regard to the least frequently strategies (autonomy, social and study preferences) so that the students can learn vocabulary perceptively through both in class and out of class activities.

Guessing and dictionary use tend to be limited to discovery of the meaning of the words and do not help the students in the long run with retention of vocabulary and may not be sufficiently applied in real world in a wide range of contexts when the need emerges. Most teachers assume that students are skilful at using a dictionary, but many students turn to a dictionary whenever they meet an unknown word in their reading instead of first utilizing the techniques of guessing from context.

Studies on VLS and language achievements have indicated that successful L2 learners employ a wide range of strategies to learn and master vocabulary. There are many factors involved in learning a language; what seems prudent is the fact that language teachers

should provide and teach the different strategies to the learners as most of them are unaware of these strategies. Many studies have provided proof that strategy instruction has an impact on strategy use and promotes learners' vocabulary learning (Boroujeni 2013). One emerging factor in this study was the fact that Iranian EFL learners use social strategies less frequently, which is consistent with other similar studies (Boroujeni, 2013; Seddigh 2012; Zarafshan, 2002), so EFL teachers and syllabus designers should provide an encouraging atmosphere in the class and guide the students in developing the essential skills for their vocabulary learning by using more social strategies.

Based on this study's findings, various vocabulary learning activities should appropriately be organized in response to the different levels and different fields of study for students. In order to assist and encourage the students to learn vocabulary in their specific fields of learning, they should also be educated to use effective strategies such as using contextual clues, using monolingual dictionaries, or even using English language media. To sum up, learning new vocabulary is a challenge to EFL students but they can overcome this challenge by having access to a variety of vocabulary learning strategies.

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## APPENDIX 1

### Vocabulary Learning Strategy Survey Items

#### *Dictionary Strategies*

1. I use an English-only dictionary (not a Persian English or English Persian dictionary).
2. I use a Persian /English or English /Persian dictionary (not an English-only dictionary)
3. If there are new words in reading passage that I do not know, I look them up in the dictionary.
4. I look up a word in the dictionary if it is of personal interest to me.
5. I look at the different meanings of a word in the dictionary.
6. I look at examples of how a word is used when I look it up in the dictionary.
7. When I look up a word in the dictionary, I look to see if it is a noun, a verb, an adverb, etc.

#### *Guessing strategies*

8. I guess the meanings of words I don't know before I ask someone else or look in the dictionary.

#### *Study preferences*

9. When I study vocabulary, I work alone.
10. When I study vocabulary, I work with one other person,
11. When I study vocabulary, I work in the dictionary.

#### *Memory strategies*

12. I keep a record of new words I see (for example, in vocabulary lists, in vocabulary notebooks, on vocabulary cards)
13. Outside of class time, I regularly review new words that I have recently seen.
14. I repeat words aloud to help me remember them.
15. I write words several times to help me remember them.
16. I remember words together that have similar spellings.
17. I remember words by creating mental pictures of them in my mind.
18. I remember words together that sound similar.
19. To help me remember words. I pay attention to the word's prefixes, roots, and suffixes (for example, pre-re, tion,- sion).
20. I remember words by grouping them together according to subject (for example, remembering names of animals together, remembering name of countries together ,remembering name of foods together).
21. I remember words by remembering the sentence I which I saw them or the context in which I saw them.
22. I remember words by testing myself (for example, by looking at the English words and trying to remember the Persian word and trying to remember English translation.)
23. I remember English words by translating them into Persian.
24. I remember English words by remembering the English definition.

#### *Autonomy*

25. I read English books, newspapers, and magazines outside of class for my own pleasure.
26. I listen to English music outside of class time.
27. I watch movies or TV in English outside of class time.

28. I try to make opportunities outside of class to use words I've just learned (for examples, using new English words for shopping, trying to talk to someone about a topic. I've just studied, etc.)

29. I learn new words from all kinds of materials (for example, from reading forms, from looking at road signs, from reading restaurant menus, etc).

***Note-taking strategies***

30. I write down a word if I think is common.

31. I write down a word that are of personal interest to me.

32. I write down a word or phrases that I think are useful.

33. I write down the definitions of English words in English.

34. I write down information about words Persian.

35. I write down information about words when I look them up in the dictionary (for example, I write down the word's meaning, collections, grammatical information, examples of usage, etc.).

***Selective Attention***

36. I have a schedule or routine that I follow for studying vocabulary.

37. I think about my progress in vocabulary learning.

38. I decide which words are important for me to learn and which are not important for me to learn.

***Social strategies***

39. I ask my teacher for meanings of new words.

40. I ask other students for meanings of new words.

41. I try to speak to native English speakers as often as possible (for example, to people from the UK. Canada, America, or Australia).