

# EXPLORING THE VOCABULARY LEARNING STRATEGIES OF TUNISIAN PRE- SERVICE PRIMARY SCHOOL TEACHERS

University of Manouba KarimKarmi08@gmail.com

# ABSTRACT

The present study was exploratory in nature and its aim was twofold. First, it probed the vocabulary learning strategies of Tunisian pre-service primary school teachers. Second, it examined the impact of gender on the choice and use of vocabulary learning strategies. Data was collected through a questionnaire consisting of 23 Likert scale statements. The participants were (N= 202, 84 males and 118 females) Tunisian Pre-service primary school teachers enrolled on the Sciences of Education course at a Tunisian university. To probe the participants' vocabulary learning strategies, I used descriptive statistics and I ran a Principal Component Analysis. To examine the effect of gender on the vocabulary learning strategies, I ran an Independent Samples t Test. The findings of the study showed that most pre-service teachers use a combination of vocabulary learning strategies. In other words, each respondent uses a variety of strategies. The study showed also that the vast majority of the respondents are reliant on some forms of association strategies. Therefore, it is safe to say that the use of association strategies is very common. The study did not find any statistically significant differences between males and females in their vocabulary learning strategies.

Key words: Vocabulary, vocabulary learning strategies, pre-service teachers

## Introduction

Communicating in a foreign language is conditional on developing the ability to understand and productively use its vocabulary. The lexicon is regarded as the most important language component for learners (Gass & Selinker, 2008). Effective use of vocabulary learning strategies can be much of a help. Gu (2003) describes the task of learning vocabulary as a problem solving task that could not be effectively approached if the learner does not adopt certain strategies. By the same token, Ellis (1994) highlights the need for conscious and explicit learning mechanisms to cope with the demands of the task. Schmitt (2000) classifies vocabulary learning strategies (VLS) into two main categories: Strategies that help the learner discover a new word's meaning, and strategies that help them consolidate the retention of a new word that has been encountered. Consolidation strategies are the processes that allow the learner to store new vocabulary items and be able to use them when communicating (Schmitt 2008, p. 838). In the present study, the focus is on the vocabulary consolidation strategies used by Tunisian pre-service primary school teachers. The study seeks to answer the following research questions:

1/What are the vocabulary learning strategies used by Tunisian pre-service primary school teachers?
2/What are the basic dimensions of the pre-service primary school teachers' vocabulary learning strategies?
3/Do male and female pre-service primary school teachers differ in their vocabulary learning strategies?

#### **Theoretical framework**

## The need for vocabulary learning strategy research

In spite of the large body of work on vocabulary learning strategies, there is a critical need for more research into this area. The literature has not provided us yet with a theory that can explain the way vocabulary is learnt. According to Schmitt (2008), how language learners can develop a rich vocabulary has not enjoyed unanimity among researchers. Therefore, there is a critical need for more research into vocabulary learning and vocabulary learning strategies, in particular (Cohen & Wang, 2018; Vieara, 2016).

As far as the Tunisian context is concerned, one must highlight that there is a dearth of research into vocabulary learning strategies. Meziane (2012) stresses the need to do more research to explore Tunisian English students' lexical problems and the way they approach the task of vocabulary learning. One must also reiterate that it is not possible to generalize the findings of studies that were carried out in contexts different from ours. Gu (2003) highlights that research into vocabulary learning and vocabulary learning strategies is context specific and therefore teachers should not make the mistake of generalizing different findings of studies to their own context. In a similar vein, Rose (2012) confirms that research frameworks need to be context specific rather than generalized.



#### Summary of the main consolidation vocabulary learning strategies

## **Repetition strategies**

As the appellation suggests, repetition strategies could be defined as any kind of repetition carried out by the learner for the purpose of memorizing a new vocabulary item (Schmitt, 2000). Repetition can be silent, aloud, or written. One must state that this strategy should not be mixed up with revision, or what is also referred to as distributed practice. Irrespective of the strategy used by the learner, regular review or distributed practice must be carried out if the learner wants to remember the new vocabulary items they have learnt. One must reiterate that effective contextualised vocabulary learning requires between 5 and 16 encounters with the new word (Nation, 2001, p. 93). Gu (2003) points out that repetition helps the learner store the new word into the longer-term memory. However, it must be borne in mind that the effectiveness of repetition as a vocabulary learning strategy has not been immune from criticism. Nation (2015, p. 136) states that the quality of repetition is of the essence. He explains that if the learner does not pay enough attention to the word and engage in some sort of deep processing, he/she is unlikely to commit it to memory.

## **Association strategies**

Association strategies allow the learner to link a new vocabulary item to other items learnt previously, or to particular circumstances and situations (Cohen, 2011, p. 147). Association strategies are considered to be among the most effective consolidation strategies. Cohen (2011) affirms that the associational patterns for learning vocabulary allow the learner to successfully remember the new vocabulary items. Li (2008, p. 80) explains that successful retention requires that the learner pay attention to the stimuli, rehearse the information to be remembered at time intervals and elaborate it. Elaboration is a cognitive learning strategy through which the learner associates new pieces of information to the concepts already in the memory. It is credited with enhancing the retention of new vocabulary items in the long-term memory (Rahmatian & Armiun, 2013, p. 49).

## **Dictionary use**

On his list of discovery strategies, Schmitt (1997) included the use of both monolingual and bilingual dictionaries. Although he might have regarded them as tools for helping the learner understand the meaning of a new word, it must be taken into account that the learner might use the dictionary in the hope of easing the retention of new vocabulary items. Looking up a new word leads to a deep processing of its meaning as the learner gets the chance to read the different uses illustrated with examples. The learner might also create some personal associations with things such as the look-up situation, the page in the dictionary; pictures, etc. (Coady & Huckin 1997, p. 112). However, it is worth noting that some language teachers denigrate the use of bilingual dictionaries, and in some cases, they even try to prevent their learners from using them. Coady and Huckin (1997) state that, contrary to the belief spread among many teachers and teacher trainers, the appropriate use of a bilingual dictionary helps the learner memorize new vocabulary.

#### Translation

The experience of teaching has made me realize that a lot of students and learners use translation as a strategy for learning and memorizing vocabulary. I have noticed that the majority of them translate the new English word into Arabic. The students who translate into French are usually those who went to French schools or speak French at home. Unfortunately, In Tunisia, a lot of language teachers think that the use of translation is a bad habit that comes to nothing (Ishler, 2010). As teachers, we should not rush into making judgements without consulting the literature and the findings of recent research. Harmer (2001) emphasizes that, as a language learning strategy, the use of the L1 is very fruitful. As far as vocabulary is concerned, a number of studies have found that translation might be an effective cognitive strategy (Hummel, 1995; Laufer & Shmueli, 1997; Prince, 1996).

## Note taking

The experience of teaching has also made me realize that a lot of students rush to take note every time I use a new word or expression, they deem interesting. They either scribble the new word in the margins or at the end of their notebook. Alhathri (2014, p. 13) confirms that making notes in the margins, between lines or in a separate vocabulary notebook, is an effective strategy to remember the meanings of new words. Barbier, Roussey, Piolat, and Olive (2006) highlight that language learners differ in what they do in note taking and when they take note. Therefore, they call for more research into note taking as a learning strategy.

#### Practice

As a vocabulary learning strategy, practice could be defined as the use of a new vocabulary item for the purpose of memorizing it. Language learners can practise new words, either orally, or through using them in written sentences. Mitchell and Myles (2013) state that learning takes place through producing language, either spoken or written. They also highlight that practice improves automaticity. Lopez (2018) explains that, in vocabulary



learning, the concept of lexical automaticity refers to the successful and quick retrieval of words while speaking. Lopez (2018, p. 25) stresses that developing this ability is being overlooked by both, teachers and learners. One must reiterate that language learners can also practise new vocabulary items silently through what is referred to as inner speech. In learning a foreign language, inner speech is a process of vital importance (De Guerrero, 2018). Therefore, as teachers and researchers, we must consider it a strategy.

# The study

# The participants

The participants who took part in the present study were 202 (84 males and 118 females) students training to qualify as primary school teachers. They were selected through a convenience sampling process. They were students at a Tunisian University. They were enrolled on a degree course called Educational Sciences. They finished high school and are studying for three years to get a degree that will allow them to be officially recruited as primary school teachers. The students come from two main backgrounds. At high school, they either specialized in science subjects, or literary subjects. On the sciences of education programme, students take the following modules: Languages (Arabic, French, and English), science subjects, arts (music and painting), human rights, and psychology.

## The instruments

## The questionnaire

Data was collected through a questionnaire that was distributed face to face and filled in on the spot. The questionnaire consisted of 23 items. Each item was incorporated with five-point Likert scale ranging from strongly disagree (1) to strongly agree (5). The questionnaire was mainly based on the taxonomies and the classification systems of Oxford (1990) and Schmitt (2000). The Strategy Inventory for Language Learning (SILL) (Oxford, 1990) was developed to investigate language learning strategies in general. However, it is worth noting that most language learning strategies listed in it are either vocabulary learning strategies, or can be used for vocabulary learning tasks. Segler (2001) confirms that the vast majority of language learning strategies listed in taxonomies such as Oxford's are either vocabulary learning strategies that belong to the memory category, or can be used for learning vocabulary. Schmitt's (2000) taxonomy of VLS was referred to since it covers most of the VLS in an organized way that would make the analysis of the data easy. In designing the questionnaire to be used in the present study, I had recourse to the SILL as it is a highly valid and reliable research instrument. The fact that it was translated into at least 17 languages and administered to 10000 learners illustrates its validity and reliability (Chamot, 2001). The SILL proved to be a valid and reliable research instrument (Mohammadi & Alizadeh, 2014).

#### **Results and discussion**

To answer the first research question (RQ 1: What are the vocabulary learning strategies used by Tunisian preservice primary school teachers?), I had recourse to the students' responses to the questionnaires items. I focused on the percentage of students selecting each alternative. To ease the interpretation of the participants' responses, I divided the respondents' answers to the questionnaire statements into four tables. In table 1 (Item 1 to item 4), I interpreted the use of vocabulary learning strategies in general. In table 2 (item 5 to item 9), I discussed the use of note taking and repetition as a vocabulary learning strategies. In table 3 (item 10 to item 19), I interpreted the use of associations as vocabulary learning strategies. In table 4 (item 20 to item 23), I commented on the use of translation and the use of dictionaries.

Table 1.	Use of vocabulary	learning strategies in general

Statements	SA	Α	Ν	D	SD
1/I do not have a specific method to remember the words I come	10.9	13.7	18.8	36.7	19.9
across 2/I use only one method to remember new words 3/To memorize new vocabulary, I try to use and combine many	5.0 24.8			54.5 10.9	
methods 4/I am trying to find a good method for remembering English vocabulary	33.7	34.7	22.8	5.9	2.0

Table 1 shows that the vast majority of the respondents are using more than one vocabulary learning strategy. In other words, to memorize new vocabulary items, they use a combination of strategies. More than 70 % of the respondents expressed their agreement with the statement *To memorize new vocabulary*, *I try to use and combine many methods*. Nearly 70% of the students did also express their disagreement with the statement *I use only one* 



*method to remember new words*. It is also worth noting that more than half of the participants stated that they are still searching for a good method for remembering English vocabulary.

Table 2. Note taking and repetition

Statements	SA	Α	N	D	SD
5/I always use a notebook to write down the new vocabulary I come across in the media or when I talk to a native speaker	16.8	29.7	8.9	32.7	11.9
6/When I come across interesting new vocabulary, I save it on my phone, or on my tablet.	19.8	36.6	11.9	25.7	5.9
7/In order to memorize a new word, I repeatedly say it in my mind	23.8	51.5	12.9	7.9	4.0
8/In order to memorize a new word, I repeatedly say it aloud 9/In order to memorize a new word, I repeatedly write it	27.7 24.8	27.7 31.7	18.8 13.9	21.8 20.8	4.0 8.9

One can conclude that opinion is divided on note taking as a vocabulary learning strategy. However, one can make the observation that the respondents save new vocabulary items on their phones or tablets more than they do in their notebooks. Opinion was also divided on the use of repetition as a vocabulary learning strategy. Repeating the new word in mind is the most frequently used repetition strategy.

Table 3. Association strategies					
Statements	SA	Α	Ν	D	SD
10/In order to memorize a new word, I try to link it to a situation (For example, when and where I was when I came across that word, the context, who I was talking to, etc.)	37.6	36.6	11.9	11.9	2.0
11/In order to memorize a new word, I try to associate it, or associate part of it, to a word in Arabic with similar sounds	12.9	32.7	17.8	23.8	12.9
12/I create rhymes to remember new English words, even if they do not make sense	10.9	23.8	32.7	26.7	5.9
13/In order to memorize a new word, I link to a visual image in my mind	21.8	47.5	14.9	11.9	4.0
14/In order to memorize a new word, I spell it in my mind	19.8	41.6	18.8	14.9	5.0
15/In order to memorize a new word ,I try to associate it, or associate part of it to a French word with similar sounds	22.8	30.7	11.9	22.8	11.9
16/When I come across a new word, I search in my memory and see if I have synonyms or antonyms of it	29.7	40.6	15.8	9.9	4.0
17/In order to memorize a new word ,I have to remember the sentence in which it was used	23.8	28.7	30.7	10.9	5.9
18/In order to memorize a new word, I try to connect it to my personal experience	10.9	35.6	25.7	25.7	2.0
19/In order to memorize a new word, I try to use it in imaginary situations in my mind	8.9	29.7	29.7	24.8	6.9

Table 3 shows that linking the new word to a situation is the association strategy most used by the informants. Making connections through antonyms and synonyms is the second most used one. Linking the new word to a visual image ranks third. Memorizing by creating rhymes is the association strategy least used.

Table 4. Translation and dictionary use					
Statements	SA	Α	Ν	D	SD
20/In order to memorize a new word ,I try to find its translation in Arabic	26.7	40.6	14.9	11.9	5.9
21/ In order to memorize a new word ,I try to find its translation in French	9.9	41.6	18.8	19.8	9.9
22/In order to memorize a new word, I check its meaning and its use in an	15.8	29.7	26.7	13.9	13.9
English dictionary.					
23/In order to memorize a new word, I check its meaning in a bilingual	15.8	35.6	21.8	12.9	13.9
dictionary(English Arabic) or (English French)					

More than 60% of the respondents translate the new English word into Arabic for the purpose of easing its retention. Translating the new word into French is less common. Only 9.9 strongly agreed with the statement *In order to memorize a new word, I try to find its translation in French*. In contrast, 26.7 % strongly agreed with the statement *In order to memorize a new word, I try to find its translation in Arabic*. Looking up new words for the



purpose of memorizing them is a strategy used by nearly half of the respondents. Bilingual dictionaries are used more than English dictionaries. To ease the interpretation of the descriptive statistics, the strategies most commonly used by the participants were listed and ranked in a descending order. Oxford's (1990) categorization was used and therefore the focus was mainly on the means higher than 3.5. Table 5 details the descriptives of the vocabulary learning strategies.

Table 5. Descriptives of the vocabulary learning strategies

Items	Mean	SD
-Linking the new word to a situation	3.9	0.89
-Combining vocabulary learning strategies	3.8	0.87
-Repeating the new word in mind	3.8	0.92
-Searching for synonyms and antonyms	3.8	0.94
-Linking the new word to a visual image	3.7	0.83
-Translating the new word into Arabic	3.7	0.98
-Repeating the new word aloud	3.5	1.03
-Spelling the new word in mind	3.5	0.86
-Remembering the sentence in which I came across the new word	3.5	1.04

# Principal component analysis

To answer the second research question (RQ2:What are the basic dimensions of the pre-service teachers' vocabulary learning strategies?), I ran a principal component analysis. Mooi, Sarstedt, and Reci (2018, p. 275) define (PCA) as a process that helps reduce large numbers of variables to only several components for the purpose of getting a clearer idea about the various relationships and correlations that might exist between the variables. I opted for it as it is the most commonly used procedure in SPSS, and it is exploratory by nature. To determine the number of principal components that can be retained for the analysis, I relied on three main criteria, the Eigen value criterion (>1.00), the total variance explained and the Cattell's scree. The four principal components accounted for 61.59 % of the total variance. Mooi et al. (2018, p. 276) explain that there is no commonly agreed threshold for a variable's communality. However, they state that the extracted factors should account for approximately 50% of a variable's variance. The Kaiser-Meyer-Olkin (KMO) index of Sampling Adequacy has the value 0.688. It can be adjudged acceptable and mediocre as long as it is higher than 0.5. The Bartlett's test of Sphericity is significant at level p <.05. In order to interpret the principal components, I labelled each one of them on the basis of the variables that load the highest. I also had recourse to theory and the findings of previous research.

				Loadii	ngs		
Items	1	2	3	4	5	6	7
13/In order to memorize a new word, I link to a visual image in my mind	.802						
16/When I come across a new word, I search in my memory and see if I have synonyms or antonyms of it	.775						
17/In order to memorize a new word, I have to remember the sentence in which it was used	.591						
19/In order to memorize a new word, I try to use it in imaginary situations in my mind	.675						
21/ In order to memorize a new word ,I try to find its translation in French		.759					
12/ I create rhymes to remember new English words, even if they do not make sense		.728					
15/ In order to memorize a new word, I try to associate it, or associate part of it to a French word with similar sounds		.718					

Table 6. Varimax Rotated Principal Component Matrix of the Vocabulary Learning Strategies



20/In order to memorize a new word ,I try to find its translation in Arabic	.776
23/In order to memorize a new word, I check its meaning in a bilingual dictionary(English Arabic) or (English	.713
French) 5/I always use a notebook to write down the new vocabulary I come across in the media or when I talk to	.794
a native speaker 6/When I come across interesting new vocabulary; I save	.636
it on my phone, or on my tablet. 10/In order to memorize a new word, I try to link it to a situation, etc.( For example, when and where I was when	.773
I came across that word, the context, etc.) 14/In order to memorize a new word, I spell it in my	.512
mind 7/In order to memorize a new word, I repeatedly say it in	.806
my mind 15/In order to memorize a new word ,I try to associate it, or associate part of it to a French word with similar	.422
sounds 8/In order to memorize a new word, I repeatedly say it	.853
aloud 18/In order to memorize a new word, I try to connect it to my personal experience	.602

On principal component 1, statement 13 In order to memorize a new word, I link to a visual image in my mind and statement 16 When I come across a new word, I search in my memory and see if I have synonyms or antonyms of it load the highest. Therefore, this component will be called 'Memorizing through visual images, antonyms and synonyms'. This component is a combination of two types of association strategies (Cohen, 2011). On principal component 2, statement 21 In order to memorize a new word, I try to find its translation in French and statement 12 I create rhymes to remember new English words, even if they do not make sense load the highest. Therefore, this component will be called 'Memorizing through translating into French and creating rhymes'. This component is a combination of two types of strategies, translation and association (Cohen, 2011; Harmer, 2001).

On principal component 3, statement 20 *In order to memorize a new word, I try to find its translation in Arabic* and statement 23 *In order to memorize a new word, I check its meaning in a bilingual dictionary (English Arabic) or (English French)* load the highest. Therefore, this component will be called 'Translating into Arabic and using dictionaries'. This component is a combination of two types of strategies, translation and dictionary use (Coady & Huckin, 1997; Harmer, 2001).

On principal component 4, statement 5 *I always use a notebook to write down the new vocabulary I come across in the media or when I talk to a native speaker* and statement 6 *When I come across interesting new vocabulary, I save it on my phone, or on my tablet* load the highest. Therefore, this component will be called 'Note taking' (Alhathari, 2014).

On principal component 5, statement 10 *In order to memorize a new word, I try to link it to a situation, (For example, when and where I was when I came across that word, the context, etc.)* and statement 14 *In order to memorize a new word, I spell it in my mind* load the highest. Therefore, this component will be called 'Relating the word to a particular situation and spelling in mind'. This component is a combination of two types of association strategies (Cohen, 2001).

On principal component 6, statement 7 In order to memorize a new word, I repeatedly say it in my mind and statement 15 In order to memorize a new word, I try to associate it, or associate part of it to a French word with similar sounds load the highest. Therefore, this component will be called 'Repeating the word in mind and associating it to a French word with similar sounds'. This component is a combination of two types of association strategies (Cohen, 2001).

On principal component 7, statement 8 In order to memorize a new word, I repeatedly say it aloud and statement 18 In order to memorize a new word, I try to connect it to my personal experience load the highest. Therefore,



this component will be called 'Repeating the new word aloud and connecting it to a personal experience'. This component is a combination of two types of strategies, repetition and association (Cohen 2011; Nation 2015).

Table 7. Descriptives of subscales of the vocabulary learning strategies

Sub-scale	Number of items	Mean	SD	Alpha
-Memorizing through visual images, antonyms and synonyms	4	3.59	1.07	.787
-Memorizing through translating into French and creating rhymes	3	3.42	1.04	.748
-Translating into Arabic and using dictionaries'	2	3.48	1.21	.719
-Note taking	2	3.23	1.21	.679
-Relating the new English word to a particular situation and spelling it in mind	2	3.76	1.09	.655
Repeating the word in mind and associating it to a French word with similar sounds	2	3.41	1.25	.628
-Repeating the new word aloud and connecting it to a personal experience	2	3.40	1.12	.614

Out of seven means, two can be adjudged high as they were higher than 3.5. The five ones that were not high fall into the medium usage level as they were superior to 2.5. On a scale from 1 to 5, Oxford (1990, p. 291) categorizes a score from 3.5 to 5 as high, a score from 2.5 to 3 as medium and a score from 1 to 2 as low. The seven Cronbach's alpha reliability coefficients can be adjudged acceptable (Hulin, Netemeyer, & Cudeck, 2001).

# Impact of gender

To answer the third research (RQ3: Do male and female pre-service primary school teachers differ in their vocabulary learning strategies?), I ran an independent samples t test on the seven components. All the Levene's tests have a significance level far higher than 0.05. Therefore, the null hypothesis was accepted and equal variances t-test was used. As shown in table 8, all the t test results have p values far higher than .05. Therefore, one can conclude that there are no statistically significant differences between males and females in their vocabulary learning strategies.

Table 8. T test Results

	Male (n=84)				_	
Components	M	SD	M	SD	t	р
-Memorizing through visual images, antonyms and synonyms	19	.98	.04	.82	-1.57	.11
-Memorizing through translating into French and creating rhymes	.05	.98	01	.96	.36	.71
-Memorizing through translating into Arabic and using dictionaries	04	.95	.00	.87	32	.74
-Note taking	02	.93	.00	.77	19	.84
-Memorizing through relating to a situation and spelling in mind	.08	.82	01	.79	.75	.45
- Repeating the word in mind and associating it to a French word with similar sounds	.05	.78	01	.83	.48	.62
- Repeating the word aloud and connecting it to a personal experience	.07	.93	01	.87	.57	.56

Descriptive and inferential statistics showed that the vast majority of the respondents are using a combination of vocabulary learning strategies. In other words, each respondent reported the use of more than one vocabulary learning strategy at the same time. One can argue that this can be regarded as a good sign. According to O'Malley and Chamot (1990), good language learners are those who use a variety of learning strategies and combine them in an orchestrated way. In the same vein, Griffiths and Cansiz (2015) explain that successful language learners use and carefully orchestrate strategy repertoires that suit their own individual needs. The present study did also show that the use of the various types of association strategies is very frequent. One can also argue that this can be regarded as a good sign. Association strategies are considered to be among the most effective consolidation strategies. Cohen (2011) affirms that the associational patterns for learning vocabulary allow the learner to successfully remember the new vocabulary items. In the present study, gender has no impact



on the use of vocabulary learning strategies. This conclusion is at variance with the findings of some studies (Lee, 2010; Bozinivic & Sidik, 2011; Tyers2011). However, one must reiterate that it does also corroborate the findings of a number of studies carried out in different contexts (Amelia, Setiyadi, & Sudirman, 2015; Tsai & Chang, 2009; Zokaee, Zaferanieh, & Naseri , 2012). Cohen and Macaro (2007) state that the effect of this gender in vocabulary learning strategy research is still debatable since different studies have come to different conclusions.

# Conclusion

The present study was carried out for the purpose of exploring the vocabulary learning strategies used by Tunisian pre-service primary school teachers. The study aimed also at examining how males and females differ in their vocabulary learning strategies. The findings showed that most Tunisian pre-service teachers combine a set of strategies and are not reliant on one strategy in particular. The findings showed that association strategies are the most commonly used ones. No statistically significant differences were found between the strategies used by males and those used by females.

# REFERENCES

Alhathri, T. (2014). Role of vocabulary learning strategies in EFL learners' word attrition. *International Journal of English Language and Linguistics Research*, 2(1), 313-328. doi:org/10.5539/ies.v8n10p86

Amelia, N. C., Setiyadi, A. B., & Sudirman, S. S. (2015). Comparison Of Vocabulary Learning Strategies Used Based On Gender And Vocabulary Size. *U-JET*, 4(5), 126-133.doi:org/10.23960/jpmipa

Barbier, M. L., Roussey, J. Y., Piolat, A., & Olive, T. (2006). Note-taking in second language: Language procedures and self-evaluation of the difficulties. *Current psychology letters. Behaviour, brain & cognition*, 20(3), 1-15. doi: org/10.4000/cpl.1283

Božinović, N., & Sindik, J. (2011). Gender differences in the use of learning strategies in adult foreign language learners. *Metodički Obzori*, 6(11), 5-20. doi :org/10.32728/mo

Chamot, A.U. (2001). The role of learning strategies in second language acquisition. In M.P.Breen (Ed.), *Learner contributions to language learning: New Directions in Research* (pp. 25-43). Harlow: Longman.

Coady, J., &Huckin, T. (1997). Second Language Vocabulary Acquisition. Cambridge: Cambridge University Press.

Cohen, AD. (2011). Strategies in learning and using a second language. Longman/Pearson Education, Harlow.

Cohen, A. D., & Wang, I. K. H. (2018). Fluctuation in the functions of language learner strategies. *System*, 74(1), 169-182. doi:org/10.1016/j.system.2018.03.011

De Guerrero, M. C. (2018). Going covert: Inner and private speech in language learning. *Language Teaching*, 51(1), 1-35.doi:10.1017/S0261444817000295

Ellis, R. (1994). *The Study of Second Language Acquisition*. Oxford: Oxford University Press.Griffiths, C., &Cansiz, G. (2015). Language learning strategies: An holistic view.*StudiesiSecondLanguage Learning and Teaching*, *5*(3), 473-493.doi:10.14746/ssllt.2015.5.3.7

Gu, Y. (2003).Vocabulary Learning in a Second Language: Person, Task, Context and Strategies.*TESL-EJ*,7(2), 20-25. Retrieved from http://www.tesl-ej.org/wordpress/

Hamada, M., &Koda, K. (2008). Influence of First Language Orthographic Experience on Second Language Decoding and Word Learning. *Language Learning*, 58(1), 1-31.doi:org/10.1111/j.1467-9922.2007.00433.x

Harmer, J. (2001). The practice of English language teaching. Longman.

Hummel, K. M. (1995). Translation and second language learning. *Canadian Modern Language Review*, 51(3), 44-455.doi:10.3138/cmlr.51.3.444

Laufer, B., &Shmueli, K. (1997). Memorizing new words: Does teaching have anything to do with it?. *RELC journal*, 28(1), 89-108.doi:org/10.1177/003368

Ishler, J. (2010). The Listening Strategies of Tunisian University EFL Learners: A strategy Based Approach to Listening to Oral English Texts (Doctoral dissertation, University of Pennsylvania).

Lee, C. K. (2010). An overview of language learning strategies. *ARECLS*, 7(1), 132-152. Lin, C. (2008). *Learning German Vocabulary: An Investigation into Learners' use of Vocabulary Leaning Strategies* (Doctoral dissertation, University of Waterloo).

Lopez, G. (2018). Automaticity in Second Language Vocabulary Learning. Language Studies, 9(1), 26-34. Retrieved from http://www.reading.ac.uk

Meziane, A. (2012). *The Lexical Problems and Lexical Strategies of Tunisian Learners in French and English Writing* (Doctoral dissertation, University of Essex). Mitchell, R., Myles, F., &Marsden, E. J. (2013). *Second Language Learning Theories*:(3<sup>rd</sup>edition. Abingdon: Routledge.



Mohammadi, H., & Alizadeh, K. (2014). An Investigation of Reliability and Validity of Strategy Inventory for Language Learning among Iranian University Students.*International Journal of English Language Teaching*, *1*(2), 53-63.doi:10.5430/ijelt.v1n2.

Mooi, E., Sarstedt, M., & Mooi-Reci, I. (2018). Market research. The process, data, and methods using stata. Springer, Singapore.

Nation, I.S. P. (2001). *Learning vocabulary in another language*. Cambridge: Cambridge University Press.

Nation, I.S.P. (2015). Principles guiding vocabulary learning through extensive reading. *Reading in a Foreign Language*, 27(1), 136-145. Retrieved from http://nflrc.hawaii.edu/rfl

Oxford, R.L. (1990). Language Learning Strategies: What Every Teacher Should Know. Boston: Newbury House.

Prince, P. (1996). Second language vocabulary learning: The role of context versus translations as a function of proficiency. *The modern language journal*, 80(4), 478-493.doi:org/10.1111/j.1540-4781.1996.tb05468.x.

Rahmatian, R., &Armiun, N. (2013). Cognitive Strategies of Encoding, Storage, and Retrieval of Lexicon Popular Techniques Applied by Iranian French LanguagLearners. *International Education Studies*, 6(8), 47-57 doi:10.5539/ies.v6n8p47

Rose, H. (2012). Language learning strategy research: Where do we go from here? *Studies in Self-Access Learning Journal*, *3*(2), 137-148. Schmitt, N. (1997). Vocabulary learning strategies. In

N.Schmitt&M.McCarthy,(Eds.), *Vocabulary: Description, Acquisition and Pedagogy* (pp. 199-227). Cambridge: Cambridge University Press.

Schmitt, N. (2000). Vocabulary in Language Teaching. Cambridge: Cambridge University Press.

Schmitt, N. (2008). Review article: instructed second language vocabulary learning. Language Teaching Research, 12(3), 329-363.doi :org/10.1177/1362168808089921

Selinker, L., & Gass, S. M. (2008). Second language acquisition. Lawrence Erlhaum Ass.

Tsai, C. C. & Chang, I. C. (2009). An examination of EFL vocabulary learning strategies of students at the University of Technology of Taiwan. *International Forum of Teaching and Studies*, 5(2), 32-38. doi:

10.4304/jltr.5.5.985-993

Viera, RT. (2016). Vocabulary knowledge in the production of written texts: A case study on EFL language learners. *RevistaTecnologica ESPOL*, 30(3), 89-105. Retrieved from http://www.rte.espol.edu.ec/index

Zokaee, S., Zaferanieh, E., &Naseri, M. (2012). On the impacts of perceptual learning style and gender on Iranian undergraduate EFL learners' choice of vocabulary learning strategies. *English LanguageTeaching*, 5(9), 138-143. doi:10.5539/elt.v5n9p138