The relationship between morphological mastery and vocabulary learning strategies of Turkish EFL learners

Fatma DEMİRAY AKBULUT[1]

Abstract

The main purpose of this study is to investigate the most or the least preferred vocabulary learning strategies (VLS) by Turkish EFL learners and to examine the relationship between morphological mastery and VLS. The participants of the study consist of 102 Translation and Interpreting department students at a state university in Turkey. The measurement tools used in the study are Vocabulary Size Test (VST) (Nation, 2001) and Vocabulary Learning Strategies Questionnaire (VLSQ) (Gu, 2018). Before the questionnaire, VST was administered to the students to determine the vocabulary size levels of them. After the test, students were asked to answer the 5-point Likert type VLSQ. The results of the study were analyzed by SPSS programme using one-way ANOVA. According to the results, the most commonly used strategies by Turkish EFL learners in vocabulary learning are *guessing* and *dictionary strategies*. The least frequently used strategies are the *use of word lists* and *visual repetition* strategies in the rehearsal category. The results obtained from students who are classified as low, medium and high-level vocabulary size, show that the most frequently used strategies of high level students are *selective attention*, *guessing strategies*, *dictionary strategies*, *notebook usage* and *note-taking* (deciding what information goes into notes). In addition, while the vast majority of students think that it is necessary to learn words through use, they believe that memorization does not play an important role in vocabulary learning. This study tends to help English learners who have difficulty in choosing vocabulary learning strategies to get morphological mastery and to lead EFL teachers by showing the advantages of using different strategies for students.

Keywords: Vocabulary learning strategies, morphological mastery, foreign language usage

Yabancı dil olarak İngilizce öğrenen Türk öğrencilerin biçimbirimsel gelişimleri ile sözcük öğrenme stratejileri arasindaki ilişki

Öz

Bu çalışmanın temel amacı, yabancı dil olarak İngilizce öğrenmekte olan Türk öğrencilerin en sık ya da en az tercih ettikleri sözcük öğrenme stratejilerinin neler olduğunu araştırmak ve biçimbirimsel yeterlik ile sözcük öğrenme stratejileri arasındaki ilişkiyi incelemektir. Çalışmanın örneklem grubunu, Türkiye'de bir devlet üniversitesinde eğitim almakta olan, 102 Mütercim Tercümanlık bölümü öğrencisi oluşturmaktadır. Çalışmada kullanılan ölçme araçları, Sözcük Düzey Testi (Nation, 2001) ve Sözcük Öğrenme Stratejileri anketidir (Gu, 2018). Sözcük düzey testi, anket çalışması öncesinde öğrencilere verilerek, öğrencilerin sözcük bilgisi düzeylerinin belirlenmesi amaçlanmıştır. Testin ardından, öğrencilerden 5'li Likert türünde olan Sözcük Öğrenme Stratejileri anketini cevaplandırmaları istenmiştir. Çalışmanın sonuçları SPSS programı kullanılarak tek yönlü ANOVA

1   Dr. Öğr. Üyesi, Bolu Abant İzzet Baysal Üniversitesi, Yabancı Diller Yüksekokulu, İngilizce Mütercim Tercümanlık Bölümü (Bolu, Türkiye), demiray_f@ibu.edu.tr, ORCID ID: 0000-0003-0689-8483 [Makale kayıt tarihi: 21.04.2020-kabul tarihi: 20.06.2020; DOI: 10.29000/rumelide.752562]

598 / *RumeliDE* Journal of Language and Literature Studies 2020.19 (June)

The relationship between morphological mastery and vocabulary learning strategies of Turkish EFL learners / F. Demiray Akbulut (pp. 597-613)

ile analiz edilmiştir. Çalışmanın sonuçlarına göre, sözcük öğrenirken İngilizce öğrenmekte olan Türk öğrenciler tarafından en sık kullanılan stratejiler *tahmin stratejileri* ve *sözlük stratejileridir*. En az sıklıkta kullanılan stratejiler ise *tekrarlama* (rehearsal) kategorisinde yer alan *sözcük listesi kullanımı* ve *görsel tekrarlama* stratejileridir. Sözcük bilgisi düzeylerine göre düşük, orta ve yüksek düzeyli olarak sınıflandırılan öğrenci gruplarından alınan sonuçlar, yüksek düzeyli sözcük bilgisine sahip olan öğrencilerin en sık kullandıkları stratejilerin, *seçici dikkat, tahmin etme stratejileri, sözlük stratejileri, sözcük defteri kullanımı*, ve *not alma* (hangi bilginin not edileceğine karar verme) stratejileri olduğunu göstermektedir. Ayrıca, öğrencilerin büyük çoğunluğu sözcüklerin kullanım yoluyla öğrenilmesinin gerekli olduğunu düşünürken, ezberlemenin sözcük öğrenmede önemli bir rolünün olmadığına inanmaktadırlar. Bu çalışma, sözcük öğrenme stratejilerini seçmekte zorluk çeken İngilizce öğrencilerinin biçimbirimsel yeterlik kazanmalarına yardımcı olma ve İngilizce öğretmenlerine -öğrenciler açısından- farklı strateji kullanmanın avantajlarını gösterme eğilimindedir.

Anahtar kelimeler: Sözcük öğrenme stratejileri, biçimbirimsel yeterlik, yabancı dil kullanımı

1. Introduction

Today, there is an increase in the number of individuals who acquire foreign languages through developing technology and new foreign language teaching methods and techniques all over the world. Lack of language teaching studies and models for production and practice in the lexical sphere is one of the problems frequently encountered by language educators as well as individuals who acquire language. In this context, it is possible to contribute to the literature theoretically and practically not only in the field of linguistics but also in the field of applied linguistics and education through linguistic-lexical studies. Considering that the behavioral approach and the productive-transformational grammar were highly dominant in the 1980s and affected the language field, it is an undeniable fact that the lexical approach is prevented from emerging (Richards & Rogers, 2001). Researchers such as Hymes (1962), Bolinger, (1976) and Fillmore (1979) who carried their studies further in the field of lexical approach contributed to the emergence of relations between vocabulary and grammar through applied studies. Many researchers argue that there is a close relationship between these two skills (Harwood, 2002; Lewis, 1998, 2000). Therefore, it is argued in the lexical approach that the teaching of grammar or individual words alone cannot be effective in the classroom environment (Richard & Rogers, 2001). In the field of cognitive linguistics, Croft and Cruse (2004) emphasized lexical constructions by stating that syntax is secondary. Researchers state that while students learn a language, they learn this language not only with regular structures, but also with different constructions. In his Cognitive Grammar study, where Langacker (1987, 1991) deals with constructions originating from words, he emphasized the constructions formed by the words in the background by not dealing with grammar in traditional sense.

In the literature, there are researchers who claim that grammar is composed of word networks (Evert, 2008; Harwood, 2002; Hoey, 2005; Hudson, 1994) and who advocate that there is no grammar in any language (Croft, 2001). From this point of view, it can be said that the studies formed by vocabulary and word networks play an important role in development of speaking and writing as productive skills. Beginning in the early years of language acquisition studies, the importance of vocabulary teaching was emphasized and increased step by step. Even Chomsky (1995), who is one of the most important advocates of grammar with the Transformational-Generative Grammar Theory, has started to emphasize its importance by taking vocabulary into its theory in the Minimalist Program. Over the years, when language studies are examined in general, the importance of vocabulary has always been tried to

be emphasized within the framework of language teaching methods and techniques that have emerged within the framework of all the skills and theories and many applied research have been conducted in this field. At this point, vocabulary learning can be evaluated as the heart of foreign language improvement. Therefore, one of the most important skills required for successful communication and interaction in a foreign language is the ability to learn words.

2. The classification of vocabulary learning strategies (VLS)

The socio-economic conditions of individuals, motivation and interest levels, learning styles and strategies affect all kinds of learning levels. From these perspectives, it is very important to help students identify and learn VLSs in order to improve their language success. VLS has been one of the most interesting topics studied by researchers who have been searching the vocabulary field in the past two decades (Gu, 2010). Vocabulary requires significant activities to master language use, and therefore the plan being implemented to use any strategy in foreign language acquisition should include continuity. Vocabulary learning strategies have been defined by many researchers in the field of language teaching for many years. Schmitt (1997) expresses that "learning is the process by which information is obtained, stored, retrieved and used. Therefore, vocabulary learning strategies could be any which affect this broadly defined process" (p. 203). According to Nation (2001), in order to define a concept as a strategy, it should include factors such as having multiple options, being complex, containing information and benefiting from education. The researcher also hesitated to make a clear definition of the teaching strategy. However, he argued that there are certain points that any strategy should include in vocabulary acquisition. As a result, knowing where and when to use VLS effectively can help students improve their language acquisition skills by increasing their self-confidence.

There are many studies in the literature about VLS classification. Stoffer (1995), in his study in the context of VLSs, mentions 9 different categories. These are the strategies involving 1) authentic language use, 2) creative activities 3) physical action, and also strategies used 4) for self-motivation 5) to create mental linkages 6) to overcome anxiety 7) to organize words and finally 8) visual/auditory strategies and 9) memory strategies. Lawson and Hogben (1996) mentions four types of VLSs in their work. They classify them as *repetition*, *word feature analysis*, *simple elaboration* and *complex elaboration*.

Schmitt (1997, 2000) basically divides VLSs into two groups. The first group includes strategies to *discover* the meaning of a new word and they are divided into two as *determination* and *social* strategies. Determination strategies include part of speech analysis, prefix, suffix and root analysis (morphological awareness), L1 cognate control, any image, visual or mimic analysis, contextualization studies and dictionary usage. Social strategies (in the same group) include situations such as asking synonyms or equivalents of the word to the classmate or teacher. The second group includes the *consolidation* strategies of the word encountered. These strategies are divided into four as social strategies, memory strategies, cognitive strategies and metacognitive strategies (see Figure 1).

600 / *RumeliDE* Journal of Language and Literature Studies 2020.19 (June)

The relationship between morphological mastery and vocabulary learning strategies of Turkish EFL learners / F. Demiray Akbulut (pp. 597-613)

VLS for discovery of a new word's meaning	VLS for consolidating a word once it has been encountered

• determination strategies
  • parts of speech, affixes and roots, L1 cognate, visual aids, guessing from context, dictionary use
• social strategies
  • ask teacher or classmate for a synonym, meaning or L1 translation
	• social strategies
	  • interacting with native speaker
	• memory strategies
	  • using semantic map, keyword method, or physical action, imaging word form or its meaning, grouping words, studying spelling.
	• cognitive strategies
	  • verbal or written repetition, using word lists, keeping a notebook for vocabulary.
	• metacognitive strategies
	  • using media in target language, continuing to study word over time.

Figure 1. The brief description of Schmitt's (1997) classification of VLS

Nation (2001) has gathered VLSs under three main headings; these consist of *planning*, *sources* and *process*. At the *planning* stage, the action to be focused on is selected. The *sources* stage is based on reaching information about the words. Finally, during the *process* phase, there is the establishment and construction of the obtained vocabulary.

3. VLS in Turkish literature and present study

VLS is also one of the topics that have been frequently studied and discussed in Turkish literature. When examining the vocabulary-based studies on language learners, it is seen that many of them give ideas for the use of different strategies. To begin with, Kocaman, Yıldız and Kamaz (2018) carried out a study in which VLSs were investigated at a Turkish Language Center (TOMER) of a state university in Turkey. The results of the study show that A1 level students apply more memory and social strategies than B2 level students. In another study by Balıdede and Lokmacıoğlu (2014), it was investigated the VLS usage by elementary and intermediate level EFL students. In this study, it was also investigated whether there is a relationship between language learning achievement and VLS usage. The results showed that VLS preferences for both groups are very similar to each other. However, the preference of most or least popular VLS used by elementary and intermediate level students is different from each other. It was also stated that intermediate level students use wider variety of VLS than the other group. Thus, it can be said that there is a significant relationship between achievement in language learning and VLS.

Baskın, İşcan, Karagoz and Birol (2017) investigated VLSs of a state university students who were enrolled in TOMER (Turkish Language Center). The researchers have used Schmitt's taxonomy (1997) and the results showed that students' language levels were effective to determine their VLS usage. While determination strategies were mostly used by the students, cognitive strategies were least used by them. In another study on VLS, Yılmaz (2017) examined the role of gender and academic major in students' VLS use and 79 Turkish students who pursued master or PhD education from different departments of 27 Turkish universities contributed to the study. 93 items-VLS questionnaire was used and the results showed that there is a "significant difference between male and female learners in favour of the female ones in the frequency VLS use while non-significant results between science major and arts and humanities major learners" (p.57).

RumeliDE Dil ve Edebiyat Araştırmaları Dergisi 2020.19 (Haziran)/ **601**

Yabancı dil olarak İngilizce öğrenen Türk öğrencilerin biçimbirimsel gelişimleri ile sözcük öğrenme stratejileri arasindaki ilişki /
F. Demiray Akbulut (597-613. s.)

From these studies, it can be stated that different VLS usage is common in vocabulary learning process however, there is no overall results on the most or least preferred strategy in the literature. In the present study, vocabulary learning strategies used by Turkish EFL learners will be analysed and the main research questions are as follows:

1) Which VLSs are mostly used by Turkish EFL learners?

2) Is there a relationship between students' morphological mastery and their vocabulary learning strategies?

4. Methodology

In accordance with the theoretical framework in this study, it is aimed to decide which VLS are commonly used and to investigate the relationship between morphological mastery and VLS usage. From this perspective, in this part, the participants, instruments and data analysis will be contributed before the results section.

4.1. Participants

The current study was conducted on Translation and Interpreting department students (N=102) at Bolu Abant Izzet Baysal University. They are from different classes of the same department. However, bilingual (German-Turkish or Arabian-Turkish) and multilingual (German-Turkish-English or German-Arabian and English) students were omitted from the study. In total, 102 students (48 males and 54 females) participated in the study and their ages are between 18-25 (M=19.02; SD= 1.72). All participants answered vocabulary size test and vocabulary learning strategies questionnaire.

4.2. Instruments

The vocabulary size test (VST) and vocabulary learning strategies questionnaire (VLSQ) were quantitatively used to collect data. VST was used to decide vocabulary level of the participants. VLSQ was used to explore Turkish students' beliefs about vocabulary learning and the strategies they used while learning and improving their vocabulary knowledge.

4.2.1. Vocabulary size test (VST)

Vocabulary Size Test-Version B (Nation, 2007) was used to elicit the vocabulary knowledge of the students (https://www.wgtn.ac.nz/lals/about/staff/Publications/paul-nation/VST-version-B.pdf). This test covers 100 items and students were asked to choose the correct item as in the example.

e.g.

1. basis: This was used as the \<basis\>.	2. limpid: He looked into her \<limpid\> eyes.
a answer	a clear
b place to take a rest	b sad
c next step	c deep brown
d main part	d beautiful

602 / *RumeliDE* Journal of Language and Literature Studies 2020.19 (June)

The relationship between morphological mastery and vocabulary learning strategies of Turkish EFL learners / F. Demiray Akbulut (pp. 597-613)

102 students provided their scores in English VST with a mean vocabulary size of 55,22 (SD=13,137). The minimum level of VST is 26, while the maximum level is 88. Thus, as stated in Table 1., the participants were divided into three groups as low level (scores between 26 and 49, M=40,33, SD=6,168), middle level (scores between 50-61, M=56,03, SD=3,550) and high level (scores between 63-88, M=70,53, SD=6,852). According to the results, there is a significant relationship between three groups (*p*=0,000).

Table 1. Descriptive statistics and ANOVA results of VST

		N	Mean	SD	Minimum	Maximum
	Low Group (26-49)	33	40,33	6,168	26	49
	Middle Group (50-61)	39	56,03	3,550	50	61
	High Group (63-88)	30	70,53	6,852	63	88
VST	Total	102	55,22	13,137	26	88
		Sum of Square	df	Mean Square	F	*p*
	Between Groups	14373,481	2	7186,740	232,681	,000
	Within Groups	3057,774	99	30,887		
	Total	17431,255	101			

4.2.2. Vocabulary learning strategies questionnaire (VLSQ)

VLSQ was used to collect data about English learners' strategy use while learning or studying vocabulary. It contains 62 items and includes a Likert-type scale, ranging from "strongly agree" to "strongly disagree" about VLS. The questionnaire was taken from the study of Gu (2018) in which the researcher updated VLS questionnaire 1997 version shortening it from 93 items to 62 items and using 100-point slider bar. According to the researcher, "conceptualization of the construct of VLS has not changed since the beginning of the instrument" and it is a fact that "this questionnaire focuses on strategies for learning single words, not multi-word units" (p.345). It is also stated that it includes metacognitive and cognitive strategies and over the years it has shown considerable stability. Following the validity and reliability analysis made in the 2018 version of the study, it was decided that there was no drawback in using this survey with Turkish EFL learners. The strategies have been divided into different categories as shown in Table 2.

Table 2. Categories and strategies in VLSQ

	Categories	Strategies	Statements
	Beliefs about vocabulary learning	Words should be memorized	Statements 1 to 6
		Words should be learned through use	Statements 7 to 10
Metacognitive	Metacognitive Regulation	Selective Attention	Statements 11 to 13
		Self-initiation	Statements 14 to 17
	Inferencing	Guessing Strategies	Statements 18 to 24
	Using dictionary	Dictionary Strategies	Statements 25 to 31
	Taking Notes	Choosing which word to put into notebook	Statements 32 to 34
		Deciding what information goes into notes.	Statements 35 to 37
	Rehearsal	Use of word lists	Statements 38 to 40

Cognitive		Oral Repetition	Statements 41 to 43
		Visual repetition	Statements 44 to 46
	Encoding	Visual Encoding	Statements 47 to 49
		Auditory encoding	Statements 50 to 52
		Use of word-structure	Statements 53 to 55
		Contextual Encoding	Statements 56 to 58
	Activation	Activation	Statements 59 to 62

The reliability of the questionnaire was calculated by SPSS program version 20.0 (Cronbach alpha=0.890). According to the results, the questionnaire is in a good level of internal consistency reliability as seen in Table 3.

Table 3. Cronbach's alpha reliability results of VLSQ

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,890	,894	62

4.3. Data analysis

In order to analyse the first research question, before the participants were grouped according to their levels, their answers to the questions were handled in a holistic way. Frequency tables were examined in order to determine the most frequently used strategies by Turkish EFL students. For the second research question, the English vocabulary levels of the participants were determined based on VST and they were divided into 3 groups as low, middle and high. After the groupings were completed, the answers given by the students to the strategies were analysed with one-way ANOVA to see the relationship between the strategies on vocabulary learning used by students and their levels of English vocabulary.

5. Results

The first research question in this study tries to reach the knowledge about which VLSs are mostly used among Turkish EFL learners. To answer this question, the responses of all participants for each item in the questionnaire have been analysed. As seen in Table 4, according to the results of the study, when students' beliefs about vocabulary learning category have been analysed, it is seen that the vast majority of students are thinking that vocabulary should be learned through use. In addition, when inferencing is examined, guessing strategies are frequently used and dictionary strategies likewise play a dominant role as a VLS. On the other hand, in the context of rehearsal category, word list usage and visual repetition can be evaluated as VLSs that are not preferred mostly by students (see also Figure 2.).

Table 4. Descriptive statistics on general usage of VLS

Categories	Strategies	N	Min.	Max.	Mean	SD
Beliefs about vocabulary learning	Words should be memorized	102	1,50	4,67	2,9984	,67303
	Words should be learned through use	102	2,25	5,00	4,0711	,60972
Metacognitive Strategies	Selective Attention	102	1,33	5,00	3,8627	,73023
	Self-initiation	102	1,25	4,00	2,3799	,49967
Inferencing	Guessing Strategies	102	1,57	5,00	4,0518	,61199
Using dictionary	Dictionary Strategies	102	1,29	5,00	4,2409	,63792

604 / *RumeliDE* Journal of Language and Literature Studies 2020.19 (June)

The relationship between morphological mastery and vocabulary learning strategies of Turkish EFL learners / F. Demiray Akbulut (pp. 597-613)

| Taking Notes	Choosing which word to put into notebook	102	1,00	5,00	3,7124	,97611
	Deciding what information goes into notes.	102	1,00	4,67	3,3889	,89133
Rehearsal	Use of word lists	102	1,00	4,33	2,7876	,80262
	Oral Repetition	102	1,00	5,00	3,0229	,95009
	Visual repetition	102	1,00	4,67	2,3170	,89538
Encoding	Visual Encoding	102	1,00	4,67	2,9444	,79338
	Auditory encoding	102	1,00	5,00	2,8333	,97013
	Use of word-structure	102	1,00	5,00	3,2516	,92803
	Contextual Encoding	102	1,00	5,00	3,4379	,87877
Activation	Activation	102	1,00	5,00	3,5588	,89773
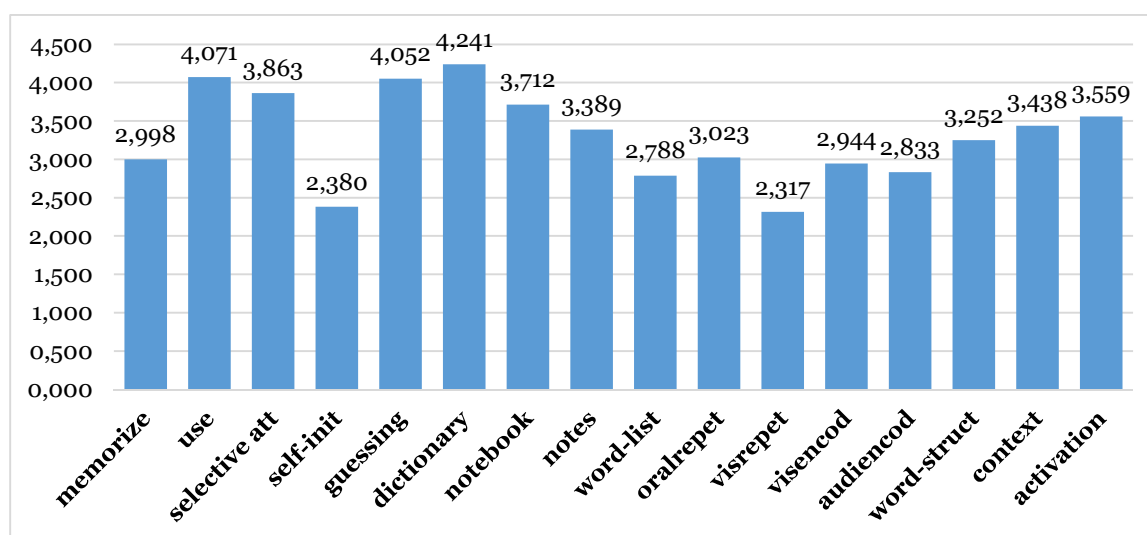
Figure 2. General usage of VLS

As seen in Table 5., the statements have been analysed in detail item by item. It can be seen in the context of students' beliefs on learning words through *use*, which can be considered as the most frequently used VLS, that students believe that reading activity is important in vocabulary learning and expressions and collocations should be given attention. In addition, the importance of spelling, pronunciation, meaning and basic usage in the same category is seen by students as the least necessary point in vocabulary learning. When *guessing strategies* are examined as another frequently used VLS, the results show that while students predict the meaning of a word, they often use logical development in context, common sense / knowledge of the world, their background knowledge of the topic and parts of speech of the new words. They also look at grammatical structure of a sentence and look for explanations in the reading texts. When we analyse *dictionary strategies* as the other strategy mostly used, it can be seen that the students look up any new word again and again if they do not know the meaning of it. If they feel that the vocabulary item is important and without knowing it they cannot understand the passage, they frequently use dictionary. They also states that, they look up not only meanings but also the examples about new words in the dictionary and apply a dictionary to know more about the usage of the unknown vocabulary item. Finally, they express that they would like have a deeper knowledge about the new words and it is important to use dictionary to understand the sentence or paragraph.

In terms of the least used strategies, it can be said that *word list* usage is not preferred by the students, however at this point, the items should be analysed deeply. The results show that the results show that students do not prepare any vocabulary cards, they use vocabulary lists and make regular reviews partially. Similarly, in *visual repetition* as the least used strategy, students express that they do not write words again and again to remember them. They also do not prefer to memorize the spelling of a new word letter by letter and to write the translation of the new words repeatedly to memorize.

Table 5. The statements on the most and least used VLSs

	Item		Mean	SD
Most Used Strategies				
Words should be learned through use	7	picking up meanings of words through reading	4,0000	,96472
	8	paying attention to expressions and collocations	4,3235	,82248
	9	learning vocabulary through reading	3,8431	,92002
	10	the least need to know a word's spelling,pronunciation,meaning and basic usage	4,1176	1,04639
Guessing strategies	18	using logical development in the context to guess the meaning of a word	4,0196	,84409
	19	using grammatical structure of a sentence to guess meaning of a new word	3,9314	,90389
	20	using common sense/knowledge of the world to guess the meaning of a word	4,0882	,73259
	21	checking guessed meaning in the paragraph/text to see if it fits in	4,1176	,81197
	22	using background knowledge of the topic to guess the meaning of a new word	4,2647	,85511
	23	looking for explanations in the reading text	4,1863	,87575
	24	using part of speech knowledge of a new word to guess its meaning	3,7549	1,03824
Dictionary strategies	25	using dictionary for the meaning of an unfamiliar word	4,4510	,81602
	26	using dictionary for any new word which is an obstacle to understand the passage if it is not known	4,4118	,87147
	27	using dictionary for a new word which is important to understand the sentence/paragraph	4,3529	,81626
	28	paying attention to the examples in a dictionary	4,1471	,92701
	29	using dictionary to have deeper knowledge of a known word	4,1373	,92318
	30	using dictionary to know more about the usage of a known word	4,2255	1,00402
	31	using dictionary to know the similarities and differences between the meanings of related words.	3,9608	,94315
Least used strategies				
	Item		Mean	SD
Use of word lists	38	going through vocabulary list several times until they are all remembered	3,3824	1,21903
	39	making vocabulary cards and carrying them all the time	1,7451	,96150
	40	making regular reviews of new words	3,2353	1,24421
Visual repetition	44	writing words again and again to remember	2,4804	1,24065
	45	memorizing the spelling of a word letter by letter.	2,2157	1,17421

606 / *RumeliDE* Journal of Language and Literature Studies 2020.19 (June)

The relationship between morphological mastery and vocabulary learning strategies of Turkish EFL learners / F. Demiray Akbulut (pp. 597-613)

46	writing new words with their translation again and again	2,2549	1,10522

In terms of the second research question concerning whether there is a relationship between VLS preference of Turkish EFL learners and the morphological mastery of them, participants were grouped into three as high, middle and low level of vocabulary knowledge. As seen in Table 6. and Figure 3., when *students' beliefs* about vocabulary learning are analyzed, it is seen that there is no significant difference between students from different groups on believing that the words should *be learned through memorization* (p =0.329). When the answers given by the students to this item are examined, it is seen that students from each group believe that it is not useful to memorize the words to learn them. On the other hand, there is a significant difference between student groups in terms of the necessity of *learning words through use* (p =0,000). Because students with a high-level of English knowledge responded to this item as "agree" or "completely agree". On the other hand, while some low or middle-level students responded positively to this item, some stated that they were unstable or disagree.

In *metacognitive regulation* category, students with a high-level of English vocabulary size used the selective attention strategy predominantly, while low and middle-level students responded similarly. According to their answers, they stated that they could not use this strategy as dominantly as high-level students could. Therefore, there is a significant difference between the groups at the selective attention stage (p =0,000). For the self-initiation strategy in the same category, there is no significant difference between the groups (p =0.091). This means that regardless of their level, each group of students is conscious about the self-initiation phase and they use this strategy. Considering the *inferencing* category, it is seen that there is a significant difference between each group of students at the point of *guessing strategies* (p =0,000). At this stage, it can be stated that high-level of students use this strategy more consciously than low and middle-level students.

In *using dictionary* category, although each group of students stated that they used the dictionary in general, there was a significant difference between the groups (p =0,000) because the answers of the high-level students are mostly "completely agree" while low and middle-level students' answers are generally "agree". When students' *taking notes* habits are examined in vocabulary learning, it can be clearly seen that in the strategies of the *notebook usage* (p=0,000) and *which information should be noted* (p=0,000), high-level students used these strategies more than low and middle-level students. In *rehearsal* category, it is seen that high-level students use *word lists usage* strategy more dominantly than the other two groups but they do not prefer *oral repetition* strategy while the other two groups use this strategy partially. Therefore, in terms of these two strategies, there is a significant difference between the groups (p = 0,000). However, when it comes to the *visual repetition* strategy in the same category, there is no significant difference between the groups (p = 0.202). At this point, what is interesting is that nearly none of the students prefers to use the visual repetition strategy.

Similar to the visual repetition strategy, *visual encoding* strategy appears as a non-preferred VLS by each group of the students in the category of *encoding*, and therefore there is no significant difference between the groups (p =0.701). Low-level students generally remain undecided, middle and high-level students prefer not to use this strategy. There is a significant difference between groups in terms of *auditory encoding* (p =0.001), *use of word structure* (p =0.000) and *contextual encoding* strategies (p =0.001) in the same category. However, when the averages of the given responses are examined, it is seen that findings do not show parallelism to each other. For example, while auditory encoding is a partially preferred strategy for middle-level students, it is not preferred by low and high-level students. Word structure usage, on the other hand, is a strategy used mostly by high-level students, whereas it is

Adres | **Adress**
Kırklareli Üniversitesi, Fen Edebiyat Fakültesi, Türk Dili ve Edebiyatı | Kırklareli University, Faculty of Arts and Sciences, Department of
Bölümü, Kayalı Kampüsü-Kırklareli/TÜRKİYE | Turkish Language and Literature, Kayalı Campus-Kırklareli/TURKEY
e-posta: editor@rumelide.com | **e-mail:** editor@rumelide.com

RumeliDE Dil ve Edebiyat Araştırmaları Dergisi 2020.19 (Haziran)/ **607**

Yabancı dil olarak İngilizce öğrenen Türk öğrencilerin biçimbirimsel gelişimleri ile sözcük öğrenme stratejileri arasındaki ilişki /
F. Demiray Akbulut (597-613. s.)

either not preferred or unstable by low and middle-level students. Although low and middle-level students are partially using the contextual encoding strategy, it seems that high-level students predominantly use this strategy. Finally, in the *activation* category, it is clearly seen that there is no significant difference between the groups (*p* =0.744). At this point, students from all levels state that they are more or less trying to use new words while learning them.

Table 6. Anova results of VLS used by students in different vocabulary size

Categories	Strategies	Groups	N	Mean	SD	F	*p*
Beliefs about vocabulary learning	Words should be memorized	Low	33	2,9798	,73333	1,124	,329
		Middle	39	2,9017	,75965		
		High	30	3,1444	,43929		
		Total	102	2,9984	,67303		
	Words should be learned through use	Low	33	3,9848	,60576	14,135	,000
		Middle	39	3,8141	,55226		
		High	30	4,5000	,45010		
		Total	102	4,0711	,60972		
Metacognitive regulation	Selective attention	Low	33	3,6162	,58405	15,432	,000
		Middle	39	3,6496	,75296		
		High	30	4,4111	,54445		
		Total	102	3,8627	,73023		
	Self-initiation	Low	33	2,4167	,59839	2,456	,091
		Middle	39	2,4744	,43223		
		High	30	2,2167	,43417		
		Total	102	2,3799	,49967		
Inferencing	Guessing strategies	Low	33	3,7749	,62273	17,868	,000
		Middle	39	3,9194	,58425		
		High	30	4,5286	,28853		
		Total	102	4,0518	,61199		
Using dictionary	Dictionary strategies	Low	33	4,0693	,67774	10,215	,000
		Middle	39	4,0733	,67316		
		High	30	4,6476	,27243		
		Total	102	4,2409	,63792		
Taking notes	Choosing which word to put into notebook	Low	33	3,4242	1,22552	10,198	,000
		Middle	39	3,4786	,82998		
		High	30	4,3333	,43769		
		Total	102	3,7124	,97611		
	Deciding what information goes into notes	Low	33	2,9293	,81120	20,751	,000
		Middle	39	3,2222	,87970		
		High	30	4,1111	,45766		
		Total	102	3,3889	,89133		

|							
Rehearsal	Use of word lists	Low	33	2,3838	,79110	15,955	,000
		Middle	39	2,6838	,79820		
		High	30	3,3667	,41384		
		Total	102	2,7876	,80262		
	Oral repetition	Low	33	3,5455	,92353	23,584	,000
		Middle	39	3,1966	,81189		
		High	30	2,2222	,56956		
		Total	102	3,0229	,95009		
	Visual repetition	Low	33	2,5354	1,05059	1,624	,202
		Middle	39	2,2650	,95568		
		High	30	2,1444	,53737		
		Total	102	2,3170	,89538		
Encoding	Visual encoding	Low	33	3,0404	,98163	,356	,701
		Middle	39	2,9060	,81989		
		High	30	2,8889	,48212		
		Total	102	2,9444	,79338		
	Auditory encoding	Low	33	2,9697	1,03200	7,521	,001
		Middle	39	3,1282	,90034		
		High	30	2,3000	,77977		
		Total	102	2,8333	,97013		
	Use of word-structure	Low	33	2,7879	1,07632	12,733	,000
		Middle	39	3,1880	,74455		
		High	30	3,8444	,61733		
		Total	102	3,2516	,92803		
	Contextual encoding	Low	33	3,2020	,85772	6,954	,001
		Middle	39	3,2735	,95167		
		High	30	3,9111	,59970		
		Total	102	3,4379	,87877		
Activation	Activation	Low	33	3,4848	,95390	,297	,744
		Middle	39	3,5449	,79445		
		High	30	3,6583	,97928		
		Total	102	3,5588	,89773		
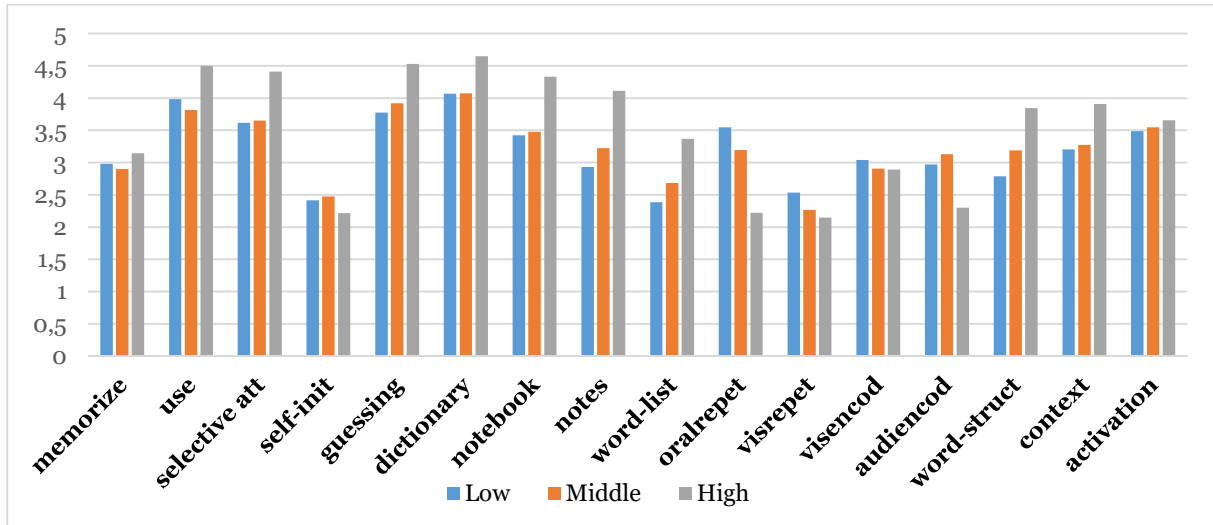
Figure 3. VLS Used by students in different vocabulary size

On the basis of each category, the strategy items that did not differ significantly between groups were examined and Table 7. presents the averages of the given answers. In the context of the *memorization* strategy, for instance, high-level students seem to agree that English can be learned if English words of all their native language meanings have been remembered while the other two groups believe that it is not necessary. In addition, high-level students state that the purpose of learning words is to remember them and it is important to have a good memory while low and middle-level students do not agree on these two statements. On the other hand, the best way to remember words is not to remember word lists or dictionary for each group. According to the results, it is interesting that repetition is important to remember the words for low and middle-level students; however, it is not very important for high-level students. Similarly, it is not necessary to memorize words to have a large vocabulary for low and high-level students, while middle-level students are generally indecisive at the point of memorizing many words to learn a large vocabulary.

In *self-initiation* strategy, it can be said that students are successful in using the strategy in a similar way. On the other hand, students look for other readings that fall under their interest besides textbooks. Based on *visual repetition* strategy, they express that they do not write repeatedly to remember the words or they do not memorize the spelling of a word letter by letter. However, as the last item, high-level students express that they both write the new words and their translation in Turkish to remember them while the other two groups do not apply this strategy.

Interestingly, as *visual encoding* strategy, students state that they do not act out to remember any word or they do not try to see the spelling of the words in their minds mostly. However, high-level students state that they create a picture in their minds to help them to remember a new word. The other two groups also use this strategy but not as dominantly as high-level students use.

Concerning *activation* strategy, students generally state that they make up their own sentences using new words and they use these new words in speech or writing. Besides, they try to use newly learned words in real or imaginary situations.

Adres	**Adress**
Kırklareli Üniversitesi, Fen Edebiyat Fakültesi, Türk Dili ve Edebiyatı Bölümü, Kayalı Kampüsü-Kırklareli/TÜRKİYE	Kırklareli University, Faculty of Arts and Sciences, Department of Turkish Language and Literature, Kayalı Campus-Kırklareli/TURKEY
e-posta: editor@rumelide.com	**e-mail:** editor@rumelide.com

Table 7. VLS Statements of Students in Different Vocabulary Size

Strategies	No	Items	Low	Middle	High	F	p
Words should be memorized	1	remembering Turkish equivalents of the new words to learn English	2,45	2,41	3,83	25,875	0,000
	2	memorizing word lists or dictionaries.	2,85	2,62	2,13	3,581	0,032
	3	remembering a word as a purpose of learning it	3,06	2,95	4,07	9,430	0,000
	4	the importance of having a good memory	2,85	2,77	3,90	10,349	0,000
	5	the importance of repetition	3,85	3,64	2,77	7,279	0,001
	6	memorizing a lot of words	2,82	3,03	2,17	6,627	0,002
Self-initiation	14	looking for other readings that fall under the interest	3,70	4,15	4,37	5,232	0,007
	15	learning words what English teacher tells only	1,82	1,69	1,30	3,164	0,047
	16	focusing on things related to examinations	2,33	2,13	1,80	2,372	0,099
	17	caring vocabulary items what teacher explains in class only	1,82	1,92	1,40	3,682	0,029
Visual repetition	44	writing words again and again to remember	2,70	2,26	2,53	1,170	0,315
	45	memorizing the spelling of a word letter by letter.	2,48	2,26	1,87	2,272	0,109
	46	writing new words with their translation again and again	2,42	2,28	3,73	14,127	0,000
Visual encoding	47	acting out some words to remember them	2,36	2,10	1,87	1,546	0,218
	48	creating a picture in mind to remember	3,45	3,31	4,43	8,914	0,000
	49	trying to "see" the spelling of the word in mind	3,30	3,31	2,37	7,205	0,001
Activation	59	making up own sentences with just learned words	3,00	3,49	3,57	2,233	0,113
	60	using new words in speech and writing	3,61	3,51	3,47	0,146	0,864
	61	using new words in real situations	3,58	3,49	3,63	0,157	0,855
	62	using new words in imaginary situations in mind	3,76	3,69	3,97	0,427	0,653

6. Conclusion and discussion

One of the most important goals of this study is to reveal the most frequently used VLSs by Turkish EFL learners and to examine the relationship between these strategies and students' morphological mastery. For this purpose, the results of the survey show that there is a significant relationship between morphological development and VLS. Concerning the first research question, when the results of some studies in the literature are examined, it is seen that they have similar results with the current study. Mokhtar et al. (2017), for instance; similarly used vocabulary learning questionnaire of Gu and Johnson (1996) in their study and concluded that guessing and dictionary strategies are the most frequently used strategies. Similarly, in the present study, the most frequently used strategies are *guessing* and *dictionary* strategies. Zou and Zhou (2017) state that "all students in the study share in common that English vocabulary should be acquired in context and by practice instead of being acquired simply by rote (p.468)". From this statement, both studies are similar to each other since the present study shows

the importance of practice emphasized by students in terms of *activation* strategy and the usage of *context*. Memiş (2018) also found a strong, significant and positive correlation between vocabulary and VLS. In the study, the researcher reveals that memory strategies are the most frequently used VLS, while the least frequently used strategy is compensatory strategies. At this point, the results of the present study differ from Memiş (2018)'s study which considered memory strategies are used more frequently.

In the context of second research question, it was found that there is a positive correlation between VLS usage and students' morphological levels. Similarly, Baskın, İşcan, Karagöz and Birol (2017) state in their studies on students learning Turkish as a foreign language that the language levels of students play an important role in determining their vocabulary strategies. Another study showing a positive correlation between usage of VLS and language level -as in the current study- belongs to Balıdede and Lokmacıoğlu (2014). The researchers state that the most and least VLSs used by the beginner and intermediate level foreign language students differ, but the general usage of VLSs of both groups are similar. On the other hand, the study of Kocaman, Yıldız and Kamaz (2018), which has not similar results to this study, was conducted with the participants who were learning Turkish as a foreign language and reached the following conclusion that participants with a low-level of language competence use more VLSs than participants with a high-level of competence. However, in the present study, students with high-level of morphologial mastery use more VLSs than the other groups. The reason for such a difference between these two studies may be that in this study the morphological mastery was measured, not the language competence of the students. From the perspective of usage cognitive or metacognitive strategies mostly, in the study of Baskın, İşcan, Karagöz and Birol (2017), it was revealed that students use *cognitive* strategies less frequently. However, in the current study, it was concluded that instead of metacognitive strategies, Turkish EFL students use cognitive strategies most frequently.

It is supposed that believing in memorization can negatively affect vocabulary learning (Gu & Johnson, 1996). "Likewise, visual repetition should also be negatively correlated with vocabulary size" (Gu, 2018: 340). In this study also, *memorization, visual encoding and visual repetition* show that there is not a significant relationship between strategy use and vocabulary size. Besides, *self-inititaion* in metacognitive category shows no relationship between strategy use and vocabulary size. In Gu's study, the belief of the students that words should be *memorized* demonstrated a negative relationship with vocabulary size. In other words, the low-level students had the largest mean score in this belief while high-level of students had the lowest mean score. However, in the present study, the low-level group had the lowest mean score while high-level group had the largest mean score. The other strategy with negative relationship is *visual repetition* in Gu's study. The low-level students used this strategy more than middle and high-level students. However, in the present study, each group did not prefer to use this strategy to remember new words. In terms of *visual encoding,* both studies show a paralelism. It means that three groups basically did not significantly differ from each other in using this strategy. However, in Gu's study, while top group slightly used this strategy more than the other groups, in the present study, low-level group slightly used this strategy more than the other two groups.

Finally, as Mehrabian and Salehi (2019) stated in their review paper, in literature there is a significant and positive correlation between vocabulary knowledge and VLS and thus, VLS training has positive effect on language learning and also learners (p.100). In general, when the results of the present study are examined, it is seen that the vast majority of students use VLS to improve morphological mastery and to develop their vocabulary knowledge. It can be thought that using vocabulary learning strategies effectively during the acquisition of English vocabulary increases morphological mastery. In a special sense, when the VLSs are analyzed, it is seen that students with high-level of English vocabulary size use

612 / *RumeliDE* Journal of Language and Literature Studies 2020.19 (June)

The relationship between morphological mastery and vocabulary learning strategies of Turkish EFL learners / F. Demiray Akbulut (pp. 597-613)

more strategies. At this point, it can be said that there is a positive correlation between the use of strategies and morphological mastery. The fact that strategies such as inferencing, using dictionary and taking notes as the most frequently used VLSs, are used more frequently by students with high-level vocabulary size, shows that having word extraction ability, using dictionary and note-taking can improve vocabulary knowledge. Finally, from these perspectives, in pedagogical sense, foreign language learners should be supported using vocabulary learning strategies to help them improve morphological mastery.

References

Balıdede, F., & Lokmacıoğlu, S. (2014). Undergraduate EFL students' preferences of vocabulary learning strategies depending on language achievement and proficiency level. *Kara Harp Okulu Bilim Dergisi Science Journal of Turkish Military Academy*, *24* (2), 1-19.

Baskin, S., Iscan, A., Karagoz, B., & Birol, G. (2017). The use of vocabulary learning strategies in teaching Turkish as a second language. *Journal of education and practice*, *8* (9), 126-134.

Bolinger, D. (1976). Meaning and memory. *Forum Linguisticum I,* 1-14.

Chomsky, N. (1995). *The Minimalist Program.* Cambridge, Mass: MIT Press.

Croft, W. (2001). *Radical Construction Grammar: Syntactic Theory in Typological Perspective.* Oxford: Oxford University Press.

Croft, W. and Cruse, D. A. (2004). *Cognitive Linguistics.* Cambridge: Cambridge University Press.

Evert, S. (2008). Corpora and collocations. *An International Handbook, in Corpus Linguistics.* Article 58. A. Lüdeling and M. Kytö (Eds.), Mouton de Gruyter, Berlin.

Fillmore, L. W. (1979). Individual Differences in Second Language Acquisition. In *Individual Differences in Language Ability and Language Behavior* (pp. 203-228).

Gu, P. Y. (2018). Validation of an online questionnaire of vocabulary learning strategies for ESL learners. *Studies in Second Language Learning and Teaching*, *8*(2), 325-350.

Gu, Y. (2010). Learning strategies for vocabulary development. *Reflections on English Language Teaching*, *9*(2), 105-118.

Gu, Y., & Johnson, R. K. (1996). Vocabulary learning strategies and language learning outcomes. *Language learning*, *46*(4), 643-679.

Harwood, N. (2002). Taking a lexical appraoch to teaching: principles and problems. *International Journal of Applied Linguistics, 12* (2)*,* 139-155.

Hoey, M. (2005). *Lexical priming: A new theory of words and language.* Psychology Press.

Hudson, R. (1994). *Word grammar.* Oxford: Basil Blackwell.

Hymes, D. H. (1962). *The ethnography of speaking.* The Hague: Mouton.

Kocaman, O., Yildiz, M., & Kamaz, B. (2018). Use of vocabulary learning strategies in Turkish as a foreign language context. *International Journal of Psychology and Educational Studies*, *5*(2), 54-63.

Langacker, R. W. (1991). *Foundations of cognitive grammar: Descriptive application.* Stanford: Stanford University Press.

Langacker, R.W. (1987). *Foundations of cognitive grammar: Theoretical prerequisites.* Stanford, California: Stanford University Press.

Lawson, M. J., & Hogben, D. (1996). The vocabulary-learning strategies of foreign-language students. *Language learning*, *46*(1), 101-135.

Lewis, M. (1998). *Implementing the lexical approach: Putting theory into practice.* Hove: Language Teaching Publications.

Lewis, M. (2000). Learning in the lexical approach. Teaching Collocation. M. Lewis (Ed.) in *Further Developments in the Lexical Approach*. (p.173), England: Language Teaching Publication.

Mehrabian, N., & Salehi, H. (2019). The effects of using diverse vocabulary learning strategies on word mastery: a review. *Journal of Applied Studies in Language*, *3*(1), 100-114.

Memis, M. R. (2018). The relationship between vocabulary learning strategies and vocabulary of learners of Turkish as foreign or second language. *Educational Policy Analysis and Strategic Research*, *13*(4), 164-185.

Mokhtar, A. A., Rawian, R. M., Yahaya, M. F., Abdullah, A., & Mohamed, A. R. (2017). Vocabulary learning strategies of adult ESL learners. *The English Teacher*, *XXXVIII:* 133-145.

Nation, I. S. (2001). *Learning vocabulary in another language*. Ernst Klett Sprachen.

Richards, J. C., & Rodgers, T. S. (2014). *Approaches and methods in language teaching*. Cambridge University Press.

Schmitt, N. (1997). Vocabulary learning strategies. In N. Schmitt & M. McCarthy (Eds), *Vocabulary: Description, acquisition, and pedagogy* (pp. 199-227). Cambridge, UK: CUP.

Schmitt, N. (2000). *Vocabulary in language teaching*. Ernst Klett Sprachen.

Stoffer, I. (1995). University foreign language students' choice of vocabulary learning strategies as related to individual difference variables. Unpublished doctoral dissertation, University of Alabama, USA.

Yilmaz, V. G. (2017). The role of gender and discipline in vocabulary learning strategy use of Turkish Graduate EFL learners. *International Journal of Innovation and Research in Educational Sciences*, *4*(1), 2349-5219.