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Effective VLSs in Language Learning: An Analysis of Micro Strategy Use^{*,}**

Dil Öğreniminde Etkili Sözcük Öğrenme Stratejileri: Mikro Strateji Kullanımının İncelenmesi

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Abstract: The purpose of this research was to investigate the micro VLSs Turkish graduate learners with high vocabulary levels employ, and thus to pinpoint the effective micro VLSs. The micro VLSs rarely or never used by most of the graduate learners with high vocabulary levels were also investigated to point out the least used micro VLSs. A descriptive research design was employed in the study. The participants were a total of 128 Turkish students pursuing their graduate (master's and doctorate) education in Turkey (EFL) and the UK (ESL). Study data were collected via the 'Vocabulary Learning Strategies Questionnaire' and the 'Vocabulary Levels Test' after taking the necessary permissions from Exeter University Graduate School of Education Ethical Committee (with the reference number D/14/15/28) on 09/03/2015 and from Dokuz Eylül University Institute of Educational Sciences Ethical Committee (with the reference number 06) on 26/05/2016. The study data were analysed using descriptive statistics (mean, standard deviation, etc.) to determine the learners with high vocabulary levels. Strategies employed by high-level learners with top five rankings and those reported to be used either rarely or none at all by most of the participants were compared and contrasted in terms of their language learning context. A *t* test was also used to see if the difference in VLS use between the ELS and EFL contexts was statistically significant or not. The results revealed that the most popular VLSs among high-level learners was 'getting help from the context to guess word meaning' and the least popular was 'getting the teacher check the vocabulary notebooks, lists and word-cards prepared by the learner for accuracy'. There were also differences in the use of VLSs between the two contexts. In the light of the study findings, it is suggested that instruction of effective VLSs be considered as part of English language teaching practices. Differences between contexts should be taken into account and further investigated.

Structured Abstract: Since the late 1970s, there has been widespread research interest in the strategies that learners use in learning and using second languages (Macaro, 2006: 320). An attempt to pinpoint the reasons why some learners achieve better results than their peers – under the same conditions – has led to an explosion

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in the amount of research into language learning strategies (LLSs) (Pavicic Takac, 2008: 58). Vocabulary learning strategies (VLSs), a part of LLSs, occupy a vital role in English language teaching because they foster the development of all four skills. Researchers have chosen to study VLSs in different ways. Hence, some of the research effort has been into the use of an individual (micro) VLS such as dictionary use (Baxter, 1980; Laufer & Hadar, 1997), keyword method (Avila & Sadoski, 1996; Köksal, 2013; Shapiro & Waters, 2005), semantic mapping (Dilek, 2010; Khoii & Sharififar, 2013; Kıvanç, 2003), and some into groups of strategies such as cognitive strategies (Prince, 1996), metacognitive strategies (Diaz, 2015; Rasekh & Ranjbar, 2003; Zhao, 2009), and memory strategies (Atay & Ozbulgan, 2007; Freyd & Baron, 1982; Morin & Goebel, 2001; Waring, 1997) while some other into the overall use of VLSs (Barcroft, 2009; Fan, 2003; Gu & Johnson, 1996; Lawson & Hogben, 1996; Schmitt, 1997).

As far as the studies regarding VLSs in the literature are concerned, categorical analysis of strategies is a more commonly used way to investigate strategies (Ellis & Shintani, 2014; Kayacıoğlu, 2013). While categorical analyses give a general idea about the rankings of strategy groups, which is a big contribution to the field, individual (micro) strategy analysis attempts to further expand our understanding of the way strategies work by providing an in-dept analysis. In this respect, a number of studies in the literature investigated the most and least frequently used micro VLSs by learners. A variety of micro strategies have been found to be the most popular VLSs by these studies.

Among these are ‘depending on vocabulary sections in textbooks in order to learn new words and practice’ (Elzubier, 2016) and ‘keeping a separate vocabulary section in notebooks’ (Saltuk, 2001). ‘Guessing the meaning of new words from the textual context’ has been found to be the most popular micro strategy by a number of studies in the literature (Amiryousefi, 2015; Maryam & Hashemi, 2014; Şener, 2003). Dictionary strategies (Maryam & Hashemi, 2014), specifically ‘using monolingual’ (Amiryousefi, 2015), ‘bilingual’ (Ay, 2006; Nirattisai & Chiramanee, 2014) and ‘picture dictionaries’ (Ay, 2006) have also been reported as the most popular micro VLSs by some studies. On the other hand, ‘using monolingual’ (Ay, 2006; Elzubier, 2016; Mahmood, 2017) and ‘bilingual dictionaries’ (Amiryousefi, 2015) were found to be the least popular micro VLSs by some other studies in the literature. Still some other micro VLSs that were found to be the least popular are ‘keeping a diary’ (Ay, 2006; Şener, 2003), ‘using flash cards’ (Ay, 2006; Nirattisai & Chiramanee, 2014; Saltuk, 2001), ‘semantic mapping’ (Elzubier, 2016) and ‘using semantic feature grids’ (Şener, 2003).

Although the findings regarding the most and least frequently used micro strategies give an idea about general tendencies of a group of learners about the popularity of particular strategies, the fact that a strategy is used very often does not actually mean that it is an effective strategy, and vice versa. In this respect, the micro VLSs that successful learners with high vocabulary levels use might prompt their effectiveness better. In the literature, among the micro VLSs that have been found to be effective are ‘guessing the meaning of new words from the textual context’ (Gu & Johnson, 1996; Nirattisai & Chiramanee, 2014), ‘analysing affixes and roots to learn / remember word meaning’ (Nirattisai & Chiramanee, 2014), ‘using dictionaries’ (Gu & Johnson, 1996), ‘note taking’ (Nation, 2001), and ‘keeping vocabulary notebooks’ (Walters & Bozkurt, 2009). As clearly seen, there is no one particular micro VLS that has been found to be effective. In this respect, the purpose of this research is to investigate the micro VLSs graduate learners with high vocabulary levels employ, and thus to pinpoint the effective micro VLSs.

A descriptive research design was employed in the study. The participants were a total of 128 Turkish students pursuing their graduate (master’s and doctorate) education in Turkey (EFL) and the UK (ESL). Study data were collected via the ‘Vocabulary Learning Strategies Questionnaire’ and the ‘Vocabulary Levels Test’ after taking the necessary permissions from Exeter University Graduate School of Education Ethical Committee (with the reference number D/14/15/28) on 09/03/2015 and from Dokuz Eylül University Institute of Educational Sciences Ethical Committee (with the reference number 06) on 26/05/2016. The study data were analyzed using descriptive statistics (mean, standard deviation, etc.) to determine the learners with high vocabulary levels. Strategies employed by high-level learners with top five rankings and those reported to be used either rarely or none at all by most of the participants were compared and contrasted in terms of their language learning context. A *t* test was also used to see if the difference in VLS use between the EFL and ESL contexts was statistically significant or not. The results revealed that the most popular VLSs among high-level learners was ‘getting help from the context to guess word meaning’ and the least popular was ‘getting the teacher check the vocabulary notebooks, lists and word-cards prepared by the learner for accuracy’. There were also differences in the use of VLSs between the two contexts. In the light of the study findings, it is suggested

that instruction of effective VLSs be considered as part of English language teaching practices. Differences between contexts should be taken into account and further investigated.

Keywords: English language learning, vocabulary learning strategies, vocabulary achievement, individual VLSs, micro strategies

Öz: Bu çalışmanın amacı sözcük bilgisi düzeyi yüksek lisansüstü Türk öğrencilerin kullandığı mikro SÖS'ü incelemek, böylece etkili mikro SÖS'ü ortaya koymaktır. Sözcük bilgisi düzeyi yüksek lisansüstü öğrencilerin çoğu tarafından nadiren kullanılan ya da hiç kullanılmayan mikro SÖS de en az kullanılan SÖS'ü ortaya koymak amacıyla incelenmiştir. Çalışmada betimsel araştırma deseni kullanılmıştır. Katılımcılar lisansüstü (yüksek lisans ve doktora) eğitimlerine Türkiye (yabancı dil ortamı) ve İngiltere'de (ikinci dil ortamı) devam etmekte olan toplam 128 Türk öğrencidir. Çalışmanın verileri Exeter Üniversitesi Eğitim Bilimleri Enstitüsü Etik Kurulu'ndan alınan D/14/15/28 sayılı ve 09/03/2015 tarihli izin ve Dokuz Eylül Üniversitesi Eğitim Bilimleri Enstitüsü Etik Kurulu'dan alınan 06 sayılı ve 26/05/2016 tarihli izinlerin ardından, 'Sözcük Öğrenme Stratejileri Anketi' ve 'Sözcük Düzeyi Testi' ile toplanmıştır. Veriler, sözcük düzeyi yüksek öğrencilerin belirlenmesi amacıyla, (ortalama, standart sapma, vb.) tanımlayıcı istatistik yöntemleri kullanılarak analiz edilmiştir. Sözcük bilgi düzeyi yüksek öğrenciler tarafından ilk beş sırada kullanılan stratejiler ve çoğu katılımcı tarafından az kullanılan ya da hiç kullanılmayan stratejiler öğrencilerin bulunduğu dil öğrenme bağlamları bakımından karşılaştırılmıştır. Ayrıca, ikinci dil ve yabancı dil bağlamları arasında SÖS'ün kullanımı bakımından anlamlı bir fark olup olmadığını anlamak amacıyla *t* testi yapılmıştır. Çalışmanın sonuçları, sözcük bilgisi yüksek öğrencilerin en çok kullandığı SÖS'ün 'sözcüklerin anlamını tahmin etmek için metinden yardım almak' ve en az kullanılan SÖS'ün 'öğrencinin kendi hazırladığı sözcük defteri, listeleri ve kartlarının doğruluğunu öğretmene kontrol ettirmek' olduğunu göstermiştir. İki dil bağlamı arasında SÖS'ün kullanımı bakımından fark olduğu ortaya çıkmıştır. Bu bulgular ışığında, İngilizce öğretiminde etkili SÖS eğitiminin verilmesi önerilmektedir. Bunun yanı sıra, dil öğrenme bağlamları arasındaki farklar dikkate alınmalı ve daha çok araştırılmalıdır.

Anahtar Kelimeler: İngilizce öğrenimi, sözcük öğrenme stratejileri, sözcük başarısı, bireysel sözcük öğrenme stratejileri, mikro stratejiler

Introduction

Since the late 1970s, there has been widespread research interest in the strategies that learners use in learning and using second languages (Macaro, 2006: 320). An attempt to pinpoint the reasons why some learners achieve better results than their peers – under the same conditions – has led to an explosion in the amount of research into language learning strategies (LLSs) (Pavicic Takac, 2008: 58). Vocabulary learning strategies, a part of LLSs, occupy a vital role in English language teaching because it fosters the development of all four skills. Researchers have chosen to study vocabulary learning strategies (VLSs) in different ways. Hence, some of the research effort has been into the use of an individual (micro) VLS such as dictionary use (Baxter, 1980; Laufer & Hadar, 1997), keyword method (Avila & Sadoski, 1996; Köksal, 2013; Shapiro & Waters, 2005), semantic mapping (Dilek, 2010; Khoii & Sharififar, 2013; Kıvanç, 2003), and some into groups of strategies such as cognitive strategies (Prince, 1996), metacognitive strategies (Diaz, 2015; Rasekh & Ranjbary, 2003; Zhao, 2009), and memory strategies (Atay & Ozbulgan, 2007; Freyd & Baron, 1982; Morin & Goebel, 2001; Waring, 1997) while some other into the overall use of VLSs (Barcroft, 2009; Fan, 2003; Gu & Johnson, 1996; Lawson & Hogben, 1996; Schmitt, 1997).

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Method

A descriptive research design was adopted in this study as the purpose of the study was to describe a given situation as precisely and carefully as possible (Büyüköztürk et al., 2010). The study was conducted to identify the effective VLSs used by Turkish graduate learners with high vocabulary levels. While doing this, the learners’ language learning contexts (ESL vs. EFL) were taken into account. In this respect, the following research questions were posed:

RQ 1: What are the most and least popular micro VLSs among learners with high vocabulary levels?

RQ 2: Is there a significant difference between the ESL and EFL contexts in VLS use by learners with high vocabulary levels?

RQ 3: What are the most and least popular micro VLSs in the ESL context?

RQ 4: What are the most and least popular micro VLSs in the EFL context?

Research Sample

Graduate students pursuing their master’s or doctorate programs meet new English words in their academic life almost on a daily basis. This makes them obliged to find ways to learn new words. In this respect, vocabulary learning strategies are of great importance for graduate learners. A total of 128 graduate students constituted the initial sample group of the research. The participants of the study were recruited from two contexts; namely, ESL and EFL. Participants from the ESL context consisted of 49 Turkish students pursuing their graduate education in a variety of departments at 21

universities in the UK. The EFL context was represented by 79 graduate students attending all-English departments at 27 Turkish universities. The initial participants of the study were determined via the random cluster sampling method among the probability sampling techniques. After running the descriptive statistics, 53 learners with high vocabulary levels (30 from the ESL and 23 from the EFL context) were determined and the rest of the analyses were carried on with the data from these high-level participants only. Distribution of these 53 good learners (as determined by their VLT scores) has been provided on Table 2 below.

Research Instruments and Procedure

The data of the study were collected via the ‘Vocabulary Learning Strategies Questionnaire’ (VLSQ) and the ‘Vocabulary Levels Test’ (VLT). The VLSQ has been developed by the researchers in line with Schmitt’s (1997) taxonomy of VLSs as part of a doctoral dissertation. The 54-item questionnaire is in 5-point Likert format. The reliability of the VLSQ, as measured by Cronbach Alpha coefficient, was calculated to be .84 and .94 for the two main subcategories of the VLSQ, namely Discovery and Consolidation strategies, with an overall Cronbach Alpha coefficient of .95. The data regarding learners’ vocabulary levels were collected via the VLT by Schmitt et al. (2001), which has five word-levels (2k, 3k, 5k, 10k and academic word-level) and 30 items on each word-level. 128 learners’ (49 ESL and 79 EFL) correct answers at each of the five word-levels of the test were added together and those with a total score of 120 (an average score of 24) and above were regarded as ‘high-level’ learners. There was a total of 53 (30 ESL and 23 EFL) high-level learners. Also, a ‘Personal Information Form’ was given to students to collect some personal data such as participants’ gender, age, academic major, etc.

Data Collection and Analysis

The study data were collected from master’s and doctorate level students between 1 June and 21 July 2015 in Turkey and in the UK. After conducting descriptive statistics (such as mean and standard deviation) on the data, learners with high vocabulary levels from each context were determined as the main goal of the study was to detect the effective individual VLSs. To this end, 30 participants from the UK, and 23 from Turkey were determined to have high vocabulary levels. An independent samples *t* test was conducted to see if there was a statistically significant difference between the two language learning contexts in the VLSs used by high-level learners. Also, the individual VLSs used by these 53 learners were analysed. Strategies with top five rankings were compared and contrasted.

Results

The findings obtained from the analyses of the collected data are presented in this section in relation to the research questions. Learners with high vocabulary levels among the total 128 participants needed to be determined in order to conduct further analyses on learners with high vocabulary levels. For this purpose, learners scores on each of the five word-levels on the test and their overall average VLT scores were calculated. Then, participants with an average score of 24 and above (out of 30) were determined in each of the ESL and EFL contexts as presented on Table 1.

Table 1: Number and Percentage of Participants who Mastered Each Word Level in the ESL and EFL Contexts

Group	2k WL		3k WL		5k WL		10kWL		AWL		High-level Voc.	
	n	%	n	%	n	%	n	%	n	%	n	%
ESL (UK) (n=49)	46	93.88	38	77.55	28	57.14	5	10.20	29	59.18	30	61.22
EFL (Turkey) (n=79)	48	60.76	28	35.44	26	32.91	7	8.86	17	21.52	23	29.11

(High-level Voc. refers to the participants with high vocabulary levels)

Participants mastering each word-level by scoring a minimum of 24 (out of 30) were determined in each context as presented on the table. According to this, the number of participants who mastered the levels decrease gradually from 2k to 10k word-levels. It is clearly seen on the table that there is a dramatic decrease in the number of participants mastering the levels after 5k word-level. Another finding is that, while the number of participants mastering the academic word level is somewhere between 3k and 5k word-levels in the ESL context, it is somewhere between 5k and 10k in the EFL context. In addition, an average VLT score was calculated for each participant by adding up their scores on each of the five word-levels and dividing the total number by five. According to this calculation, those with an average VLT score of 24 and above (just like the threshold for each word-level) were determined as learners with high vocabulary levels. The total number of participants with high vocabulary levels has been calculated to be 53 (30 in the ESL and 23 in the EFL context). The distribution of the participants with a high-level of vocabulary in terms of language learning context, gender and academic major has been presented on Table 2 below.

Table 2: Distribution of the Learners with High Vocabulary Levels according to Context, Gender, and Academic Major

		UK (ESL) (n=30)		Turkey (EFL) (n=23)		Overall (n=53)	
			%		%		%
Gender	Female	15	50	16	69.57	31	58.49
	Male	15	50	7	30.43	22	41.51
Academic Major	A&H	20	66.67	19	82.61	39	73.58
	Science	10	33.33	4	17.39	14	26.42

(A&H refers to arts & humanities major learners)

Table 2 reveals that while the ESL context is represented by an equal number of females and males (15 each), the ratio of males is about one-third (7/16). As for academic major, the number of arts & humanities majors is double that of science majors in the ESL context. On the other hand, there are 19 arts & humanities and only 4 science majors in the EFL context. In addition, the overall VLS use of the total 53 learners with high vocabulary levels were calculated to be 3.08 (SD=.64, SE=.09) out of the possible 5.

RQ 1: What are the most and least popular micro VLSs among learners with high vocabulary levels?

The most popular micro VLSs among the participants with high vocabulary levels are presented on Table 3.

Table 3: The Most Frequently Used Micro VLSs by High-Level Learners

Ranking	Users (/53)	%	Category	Item no	Strategy
1	49	92	D-DET.	5	I try to get some help from the context (words around it) as I am guessing the meaning of a word.
2	46	87	D-DET.	3	I try to guess the meaning of a word considering a Turkish word (if there are any) with the same stem and with a similar meaning (e.g. ‘action – aksiyon’, ‘decoration – dekorasyon, etc.).
3	44	83	C-MET.	52	I learn the meaning of the English words that I come across with in my daily life (e.g. in the name of a cafe, on the poster of a film, in a song).
4	43	81	D-DET.	2	I guess the meaning of a word using its stem, prefix and suffix (e.g. guessing the meaning of ‘unhelpful’).
5	41	77	D-DET.	4	I try to guess the meaning of a word with the help of the figures and shapes given with it.
5	41	77	C-MEM.	31	I learn how to pronounce the word correctly.

As Table 3 indicates, the most popular VLS among high-level learners is ‘I try to get some help from the context (words around it) as I am guessing the meaning of a word’, with 49 out of 53 learners indicating that they use this strategy either ‘often’ or ‘very often’. As its category suggests, this strategy serves to determine the meaning of an unknown word, and apparently, high-level graduate learners find it practical to use the context the word is used in to do this. This strategy also acts as a reading strategy. This is most probably why high-level learners (those with high vocabulary levels) use this strategy frequently, with reading skill being highly important for graduate learners (Chen, 2017). Another strategy high-level learners use to determine the meaning of an unknown vocabulary item is ‘considering a Turkish word (if there are any) with the same stem and with a similar meaning (e.g. action-aksiyon, decoration-dekorasyon, etc.)’, which is the second most popular VLS among them (46 out of 53 learners). Resemblances between words in the target and mother language surely make their retention easier (Guerrero-Simón, 2014), thus, it is no wonder that high-level graduate learners frequently use this as a VLS.

The third most popular VLS is ‘learning the meaning of the English words that one comes across with in their daily life (e.g. in the name of a cafe, on the poster of a film, in a song)’. This metacognitive strategy is apparently used by 44 out of the total 53 high-level learners. Also, 43 out of these 53 high-level learners frequently employ the strategy of ‘guessing the meaning of a word using its stem, prefix and suffix (e.g. guessing the meaning of ‘unhelpful’), which is also a strategy to determine an unknown word’s meaning. Still another guessing strategy that is popular among high-level learners is ‘trying to guess the meaning of a word with the help of the figures and shapes given with it’, with 41 out of the total 53 using it either ‘often’ or ‘very often’. And the fifth most popular VLS among learners with high vocabulary levels is the memory strategy of ‘learning how to pronounce the word correctly’, with 41 out of the 53 high-level learners using it frequently. While the use of this strategy is a must in an ESL context, its importance for an EFL learner depends on the reason why s/he is learning and what s/he is going to use the language for. The least popular VLSs among learners with high vocabulary levels are presented on Table 4 below.

Table 4: The Least Frequently Used Micro VLSs by High-Level Learners

Ranking	Users (/53)	%	Category	Item no	Strategy												
1	46	87	C-SOC.	16	I get the teacher check the vocabulary notebooks, lists and word-cards I prepare for accuracy.												
2	45	85	C-MEM.	34	I study a word by underlining its initial letter.												
3	42	79	C-MEM.	35	I try to learn the words that fall into my field of interest even when they are not included in the textbooks.												
4	40	75	C-MEM.	43	I study words with similar meanings by using semantic features tables. For example; <table border="1"><tr><td></td><td>wrist</td><td>wall</td><td>table</td></tr><tr><td>‘watch’</td><td>✓</td><td></td><td></td></tr><tr><td>‘clock’</td><td></td><td>✓</td><td>✓</td></tr></table>		wrist	wall	table	‘watch’	✓			‘clock’		✓	✓
	wrist	wall	table														
‘watch’	✓																
‘clock’		✓	✓														
5	39	74	C-COG.	49	I audio-record lists of vocabulary and listen to them over and over.												
5	39	74	C-MET.	50	I study words by attaching objects their English equivalent on them.												

As shown on Table 4, the least frequently used micro VLS by learners with high vocabulary levels is 'getting the teacher check students' notes for accuracy', with 46 out of 53 indicating that they 'rarely' or 'never' use it. Since the participants of the study are graduate learners who must have gained autonomy in their vocabulary learning, this is more than normal for these learners. The memory strategies of 'underlining the initial letter of a word while studying it', 'trying and learning words relating to the field of interest', and 'using semantic features tables' are also among the least popular VLS among high-level Turkish graduate learners (irrespective of context). The findings also show the nonpopularity of the strategies of 'audio-recording vocabulary list to listen to them over and over' and 'attaching name tags on objects', the second one being handy for elementary level mostly, when most of the words learnt refer to concrete objects.

RQ 2: Is there a significant difference between the ESL and EFL contexts in VLS use by learners with high vocabulary levels?

Below on Table 5 are the *t* test findings regarding the difference in high-level participants' overall VLS use between the ESL and EFL contexts.

Table 5: Means and Standard Deviations for VLS Use of the Learners with High Vocabulary Levels (across the ESL and EFL Contexts)

	ESL (n=30)		EFL (n=23)		ESL vs. EFL		
	Mean	SD	Mean	SD	<i>t</i>	<i>p</i>	<i>r</i>
Overall VLS use	2.84	.55	3.39	.62	-3.378	.001*	.43

(* marks statistically significant *p* values)

A comparison of the ESL and EFL contexts in terms of the reported frequency of use of VLSs by learners with a high level of vocabulary on Table 5 revealed statistically significant difference ($p < .05$) in the general average scores between the ESL and EFL contexts [$t(51) = -3.378$, $p < .05$], with a medium sized effect ($r = .43$). One point which draws attention here is that the EFL average is higher than the ESL average, which shows that the high-level learners in the EFL context use VLSs more frequently than those in the ESL context, and that the difference between the mean scores is statistically significant. Since both groups mentioned here consist of high-level learners only, more frequent use of VLSs by EFL learners prompts that in the EFL context students have to compensate for the lack of input and other disadvantages of the EFL context as compared to the ESL by adopting more VLSs more frequently.

RQ 3: What are the most and least popular micro VLSs in the ESL context?

Below on Table 6 are the most popular VLSs among the learners with high vocabulary levels in the ESL context.

Table 6: The Most Frequently Used Micro VLSs by High-Level Learners in the ESL Context

Ranking	Users (/30)	%	Category	Item no	Strategy
1	28	93	D-DET.	5	I try to get some help from the context (words around it) as I am guessing the meaning of a word.
2	26	87	D-DET.	3	I try to guess the meaning of a word considering a Turkish word (if there are any) with the same stem and with a similar meaning (e.g. 'action – aksiyon', 'decoration – dekorasyon, etc.).
3	24	80	D-DET.	2	I guess the meaning of a word using its stem, prefix and suffix (e.g. guessing the meaning of 'unhelpful').
4	23	77	C-MET.	52	I learn the meaning of the English words that I come across with in my daily life (e.g. in the name of a cafe, on the poster of a film, in a song).
5	22	73	D-DET.	4	I try to guess the meaning of a word with the help of the figures and shapes given with it.
5	22	73	C-MEM.	30	I learn the word together with its spelling.
5	22	73	C-MEM.	31	I learn how to pronounce the word correctly.

A quick look at the table reveals that four of the strategies with top five rankings are guessing strategies, which apparently high-level Turkish graduate learners in the ESL context find handy. Similarly with the whole group, the most popular VLS among the ESL high-level learners is also 'getting help from the context to guess word meaning', with 28 out of 30 participants using it frequently. The second most popular strategy (26/30) is 'considering a Turkish word (if there are any) with the same stem and with a similar meaning (e.g. action-aksiyon, decoration-dekorasyon, etc.)'. Since resemblances between words in the target and mother language make their retention easier (Guerrero-Simón, 2014), it is no wonder that high-level graduate learners frequently use this as a VLS. Also, 24 out of these 30 high-level learners frequently employ the strategy of 'guessing the meaning of a word using its stem, prefix and suffix (e.g. guessing the meaning of 'unhelpful')'. The metacognitive strategy of 'learning the meaning of the English words that I come across with in daily life' is the VLS with the top fourth ranking among high-level ESL learners. Still another guessing strategy that is popular is 'trying to guess the meaning of a word with the help of the figures and shapes given with it', with 22 out of the total 30 using it frequently. The memory strategies of 'learning the word spelling' and 'pronunciation' are also popular among high-level ESL learners with again 22 of them using them frequently. The least popular VLSs among learners with high vocabulary levels in the ESL context are presented on Table 7 below.

Table 7: The Least Frequently Used Micro VLSs by High-Level Learners in the ESL Context

Ranking	Users (/30)	%	Category	Item no	Strategy												
1	29	97	D-SOC	8	I ask the teacher to translate the word into Turkish.												
1	29	97	C-MEM.	34	I study a word by underlining its initial letter.												
2	28	93	C-SOC.	16	I get the teacher check the vocabulary notebooks, lists and word-cards I prepare for accuracy.												
2	28	93	C-MEM.	35	I try to learn the words that fall into my field of interest even when they are not included in the textbooks.												
3	25	83	C-MEM.	19	I revise a word I have recently learnt together with a visual conveying its meaning.												
3	25	83	C-COG.	50	I study words by attaching objects their English equivalent on them.												
4	24	80	C-SOC.	15	I rehearse and practice the words I have learnt with friends from school.												
4	24	80	C-MEM.	43	I study words with similar meanings by using semantic features tables. For example; <table border="1"><tr><td></td><td>wrist</td><td>wall</td><td>table</td></tr><tr><td>'watch'</td><td>✓</td><td></td><td></td></tr><tr><td>'clock'</td><td></td><td>✓</td><td>✓</td></tr></table>		wrist	wall	table	'watch'	✓			'clock'		✓	✓
	wrist	wall	table														
'watch'	✓																
'clock'		✓	✓														
4	24	80	C-COG.	49	I audio-record lists of vocabulary and listen to them over and over.												
5	23	77	C-MEM.	24	I create a mind map for the words that are related in topic or in meaning and study them together with that map (e.g. I create a mind map for the word 'transportation' by categorising it into 'land', 'air' and 'water' first, and then categorise each into smaller ways of transport on my mind map).												

As shown on Table 7, the least popular VLSs among the ESL learners with high vocabulary levels are 'asking the teacher to translate the word into Turkish' and 'underlining initial letter of a word while studying it', 29 out of the 30 of them indicating their nonpopularity, with the obvious reason for the former one that teachers in the UK would not translate words into Turkish, and that these graduate learners are autonomous learners of vocabulary. 'Getting the teacher check students' notes for accuracy' and 'trying and learning words relating the field of interest' come second in the ranking of the least popular strategies among high-level learners in the ESL context, with 28 out of 30 indicating that they 'rarely' or 'never' use them, learners' autonomy being an important factor for especially the former one. Third in the ranking (with 25 out of the 30 learners indicating their nonpopularity) come the strategies of 'revising a word together with a visual conveying its meaning' and 'attaching English nametags to objects'. Both of these strategies are mostly used by young learners and are handier at the beginners and elementary level when most of the words learnt refer to concrete objects. The social strategy of 'rehearsing vocabulary with friends from school' is also among the nonpopular strategies among high-level EFL learners most probably because graduate learners are autonomous in their vocabulary learning. 'Semantic feature tables', 'audio-recording word list' and 'creating a mind map', all of which are quite demanding and time consuming, are the other least popular VLSs among the ones with the top five rankings.

RQ 4: What are the most and least popular micro VLSs are in the EFL context?

Presented on Table 8 below are the most popular VLSs with top five rankings among the graduate learners in the EFL context with high vocabulary levels.

Table 8: The Most Frequently Used Micro VLSs by High-Level Learners in the EFL Context

Ranking	Users (/23)	%	Category	Item no	Strategy
1	21	91	D-DET.	5	I try to get some help from the context (words around it) as I am guessing the meaning of a word.
1	21	91	C-MEM.	37	I retrieve a word getting help from its pre-fix, suffix and/or root (e.g. retrieving the meaning of the word ‘unhappiness’ from its negativity prefix “un-” and noun suffix “-ness”).
1	21	91	C-MET.	52	I learn the meaning of the English words that I come across with in my daily life (e.g. in the name of a cafe, on the poster of a film, in a song).
2	20	87	D-DET.	3	I try to guess the meaning of a word considering a Turkish word (if there are any) with the same stem and with a similar meaning (e.g. ‘action – aksiyon’, ‘decoration – dekorasyon, etc.).
3	19	83	D-DET.	2	I guess the meaning of a word using its stem, prefix and suffix (e.g. guessing the meaning of ‘unhelpful’).
3	19	83	D-DET.	4	I try to guess the meaning of a word with the help of the figures and shapes given with it.
4	18	78	D-DET.	1	I try to guess the meaning of a word by its word form (such as noun, verb, adjective, etc.).
4	18	78	C-MEM.	30	I learn the word together with its spelling.
5	17	74	C-MEM.	32	I read the words aloud as I am studying them.
5	17	74	C-COG.	47	I study vocabulary from my notes that I take during classes.

As shown on Table 8, the most popular VLS among high-level EFL learners is again ‘I try to get some help from the context (words around it) as I am guessing the meaning of a word’, with 21 out of the total 23 high-level EFL learners indicating that they use this strategy either ‘often’ or ‘very often’. The memory strategy of ‘getting help from word prefix/suffix in word retrieval’ and the metacognitive strategy of ‘learning the meaning of the English words that I come across with in daily life’ are also the VLSs with the top ranking among high-level EFL learners. Another guessing strategy; ‘considering a Turkish word (if there are any) with the same stem and with a similar meaning (e.g. action-aksiyon, decoration-dekorasyon, etc.)’ comes second in the ranking with 20 out of the 23 high-level EFL learners using it frequently, which shows that EFL learners also make use of the resemblances between words in the target and mother language to make their retention easier (Guerrero-Simón, 2014). Two more guessing strategies; ‘guessing the meaning of a word using its stem, prefix and suffix (e.g. guessing the meaning of ‘unhelpful’)’ and ‘trying to guess the meaning of a word with the help of the figures and shapes given with it’ are frequently used by 19 out of the 23 high-level EFL learners. Still another guessing strategy; ‘guessing the meaning of a word by its word form (such as noun, verb, adjective, etc.)’ is frequently used. ‘Learning the word spelling’, ‘reading the words aloud’, and ‘studying vocabulary from my notes’ are the other popular strategies among high-level EFL learners.

In addition to this, a comparison of the most popular strategies among high-level Turkish graduate learners in the ESL and EFL contexts (Table 6 and 8) reveals that while all the strategies frequently used by the ESL learners are also used by the learners in the EFL context as well as some additional strategies. That is, the first thing that attracts attention here is that high-level EFL learners seem to use more strategies more frequently than their counterparts in the ESL context, which might stem from their aim to compensate for the disadvantages (lack of input) in the EFL context. The least popular VLSs with top five rankings among the EFL learners with high vocabulary levels are presented on Table 9.

Table 9: The Least Frequently Used Micro VLSs by High-Level Learners in the EFL Context

Ranking	Users (/23)	%	Category	Item no	Strategy												
1	18	78	C-SOC.	16	I get the teacher check the vocabulary notebooks, lists and word-cards I prepare for accuracy.												
2	16	70	C-MEM.	34	I study a word by underlining its initial letter.												
2	16	70	C-MEM.	43	I study words with similar meanings by using semantic features tables. For example; <table border="1"><tr><td></td><td>wrist</td><td>wall</td><td>table</td></tr><tr><td>‘watch’</td><td>✓</td><td></td><td></td></tr><tr><td>‘clock’</td><td></td><td>✓</td><td>✓</td></tr></table>		wrist	wall	table	‘watch’	✓			‘clock’		✓	✓
	wrist	wall	table														
‘watch’	✓																
‘clock’		✓	✓														
3	15	65	C-COG.	49	I audio-record lists of vocabulary and listen to them over and over.												
4	14	61	C-MEM.	35	I try to learn the words that fall into my field of interest even when they are not included in the textbooks.												
4	14	61	C-COG.	50	I study words by attaching objects their English equivalent on them.												
5	13	57	D-SOC.	9	I ask the teacher the synonym/antonym of the word.												
5	13	57	C-MEM.	19	I revise a word I have recently learnt together with a visual conveying its meaning.												
5	13	57	C-MEM.	29	I learn words by making up a story with them.												

Table 9 reveals that the least popular VLS among the EFL learners with high vocabulary levels is 'getting the teacher check the vocabulary notebooks, lists, etc. for accuracy', with 18 out of the total 23 using it 'rarely' or 'never'. 'Underlining the initial letter of a word while studying it' and 'using semantic features tables', with 16 out of the 23 of them indicating their nonpopularity, come second in the ranking of the least popular VLSs among these learners. Next in the ranking is 'audio-recording word lists' with 15 out of the total 23 high-level EFL learners indicating its nonpopularity. 14 of the EFL learners indicated that they 'rarely' or 'never' used the strategies of 'trying and learning words relating the field of interest' and 'attaching English nametags to objects', the latter of which is mostly used by young learners and is handier at the beginners and elementary level when most of the words learnt refer to concrete objects. 'Asking the teacher word synonym/antonym' is also a nonpopular strategy among these learners most probably because most of the vocabulary learning for graduate learners takes place out of class autonomously. Two more demanding / time consuming and young-learner-style strategies that are not popular either are 'revising a word with a visual conveying its meaning' and 'making up a story with the new words'.

Discussion, Conclusion and Recommendations

Just like vocabulary occupies a vital role in language learning, vocabulary learning strategies are of great importance in vocabulary learning. Within the scope of the study, micro VLSs used by Turkish graduate learners with high vocabulary levels were investigated in order to determine the effective strategies in vocabulary learning. Studies in the literature on VLSs used in ESL and EFL contexts have indicated that language learners differ in the range of strategies they use and the effectiveness with which they employ them (Gu & Johnson, 1996; Lawson & Hogben, 1996; Moir & Nation, 2002; Schmitt, 1997). The literature of VLSs also suggests that there is strong relationship between one's vocabulary level and the VLSs they use, and that overall strategy use by learners at higher proficiency levels tends to be more frequent and at a much wider range (than those at lower

proficiency levels) (Halbach, 2000; Jeon, 2007; Jurkovic, 2006; Park, 2001; Schmitt, 1997). These findings show the importance of strategy use in vocabulary learning as well as prompting the fact that investigating VLS use patterns of learners with similar vocabulary levels (as is the goal in this study) would yield more reliable results. Besides this, focusing on the VLS use patterns by learners with high vocabulary levels can well provide us with the effective VLSs, which might – in turn – add to the understanding of the way strategies work, and thus contributing to the field with implications for novice language learners.

The study results revealed 53 out of the total 128 Turkish graduate learners had a high level of vocabulary. Statistics carried out on these high-level learners revealed significant difference in VLS use between ESL and EFL contexts (Table 5). First of all, the determination of participants with high vocabulary levels resulted in 61.22% (30/49) of the ESL learners while only 29.11% (23/79) of the EFL learners had high vocabulary levels. This finding clearly shows the discrepancy in the vocabulary levels (and most probably English proficiency levels) of the graduate level Turkish learners in the ESL and EFL contexts. This difference surely reflects on the VLSs used in each context, making learners with high vocabulary levels in the EFL context try hard to compensate for the disadvantages of the EFL context as opposed to the ESL context, which resulted in more VLS use in the EFL context.

Another important finding was that the most frequently used micro VLS by Turkish graduate learners was ‘I try to get some help from the context (words around it) as I am guessing the meaning of a word’ on Schmitt’s (1997: 205-206) taxonomy of VLSs. Thornbury (2002) views guessing from context as one of the most useful VLSs learners can acquire and apply both in and out of class. The usefulness of the strategy of guessing from context is emphasized in many studies (Decarrio, 2001; Edwards, 2009; Mart, 2012; Prince, 1996) in the literature. Nassaji (2004), who investigated the relationship between learners’ depth of vocabulary and their contextual guessing strategy use, concluded that learners’ use of this strategy depend heavily on having an adequate knowledge base (of the language) in place (such as a threshold of vocabulary knowledge), and that the ability to use guessing from context strategy differs from learner to learner in that respect. This finding is in line with the present study’s in that it is the most popular VLS among learners with high vocabulary levels. The least frequently used micro VLS among graduate learners with high vocabulary levels, on the other hand, was ‘getting the teacher check the vocabulary notebooks, lists and word-cards for accuracy’, most probably because most of the vocabulary learning for graduate learners takes place out of class, and that they are autonomous in their vocabulary learning.

All in all, an analysis of the most and least frequently used strategies reveals that, although there are differences in the most frequently used strategies in the ESL and EFL contexts, the least frequently used strategies in the two contexts are more similar than different. Moreover, no strategy is used the most frequently in one context and the least frequently in the other, which is also a sign of the similarity between the two contexts.

The findings of the study can contribute to the field in a number of ways. First of all, they help us get a better insight into the ways learners learn new vocabulary when studying a foreign language. Secondly, they show us the role of language learning context in the employment of VLSs. Thirdly, they provide us with the differences in micro VLS use in the ESL versus the EFL. Both language teachers and curriculum planners as well as novice researchers in the area can benefit from the findings of the study. Also, graduate programs can benefit from the findings and entegrate VLS instruction into their curriculum in parallel with the learner needs.

In the light of the study findings, it can be suggested that the differences in VLS use between the two language learning contexts be taken into account in VLS instruction. Learners should be equipped with a wide range of VLSs to choose from according to their needs and interests if the instruction cannot be tailor cut. Another suggestion to be made here is that VLS instruction for adult

learners (aged 22-43 in this case) should focus more on using contextual clues to guess word meaning. Future researchers are recommended to carry out studies investigating effective strategy use using qualitative research methods as well. An investigation of what poor learners do could well help us understand how VLSs should be used.

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