45-An examination of differences between genders, academic majors and grade levels of language learners on the use of language learning strategies[1]

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Abstract

This study aimed to examine the relationship between the second language learning strategy use, academic major, gender and grade level. 252 Bosnian university students studying in Bosnia and Herzegovina participated in the study. The research data were collected from two inventories: an individual background questionnaire and the Strategy Inventory of Language Learning (SILL) (Oxford, 1990). To analyze the data, the descriptive quantitative method was used. Descriptive and referential statistics were reported by taking gender (males vs females), academic major (education vs engineering vs economics) and grade levels (freshmen, sophomores vs juniors) as the variables. The results indicated that the males employed different types of strategies more frequently than the females. In terms of the academic majors, statistically significant differences were found: The students majoring in economics preferred memory, compensation and social strategies while students majoring in engineering preferred affective, metacognitive and cognitive ones more. Students majoring in the field of education preferred all the strategy types the least. The grade level was found to be statistically insignificant on the use of the language learning strategies of the Bosnian university students. The results provided significant practical and pedagogical implications regarding language learning and teaching, understanding the role of individual differences in language education.

Keywords: Academic major, Bosnian context, gender, grade level, language learning strategies

Dil öğrenenlerin cinsiyet, akademik dallar ve sınıf düzeyleri arasındaki farklılıkların dil öğrenme stratejilerinin kullanımına ilişkin incelenmesi

Öz

Bu çalışma, ikinci dil öğrenme stratejisi kullanımı, akademik alan, cinsiyet ve sınıf düzeyi arasındaki ilişkiyi incelemeyi amaçlamaktadır. Bosna Hersek'ten 252 Bosnalı üniversite öğrencisi çalışmaya katılmıştır. Araştırma verileri iki envanterden toplandı: bireysel bilgi anketi ve Dil Öğrenme Strateji Envanteri (SILL) (Oxford, 1990). Verileri analiz etmek için betimleyici nicel yöntem kullanılmıştır. Betimleyici ve çıkarımsal istatistiki veriler, dil öğrenme stratejilerinin kullanımı ile cinsiyet (erkekler ve kadınlar), akademik alan (eğitim, ekonomi ve mühendislik gibi) ve sınıf seviyeleri (birinci, iikinci ve üçüncü sınflar) değişkenleri bakımından raporlanmıştır. Sonuçlar, erkeklerin kadınlara göre daha sık ve farklı strateji türlerini kullandığını göstermiştir.

[1] This study was generated from Phd dissertation titled "The Use of Language Learning Strategies and Its Relationship with Personality Traits and Individual Differences: The Case of Bosnian Students at a Private University" and presented at 2nd International Congress on Academic Studies in Philology will be held in Bandırma, Turkey on 2-5 September, 2020.

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Akademik alan açısından da istatistiksel olarak anlamlı farklılıklar bulunmuştur: Ekonomi alanından öğrenciler hafıza, telafi ve sosyal stratejileri tercih ederken, mühendislik alanından öğrenciler daha çok duyuşsal, üstbilişsel ve bilişsel stratejileri tercih etmişlerdir. Eğitim alanındaki öğrenciler ise diğerlerine kıyasla en az strateji türlerini tercih etmişlerdir. Bosnalı üniversite öğrencileri arasında dil öğrenme stratejisi kullanımında sınıf düzeyi bakımından istatistiksel olarak bir ilişki bulunamamıştır. Sonuçlar, dil öğrenimi ve öğretimi ile ilgili önemli uygulamalı ve pedagojik çıkarımlar sağlamakta ve bireysel farklılıklar kavramının dil eğitimindeki rolünü anlamaya yönelik katkıda bulunmaktadır.

Anahtar kelimeler: Akademik alan, Bosna bağlamı, cinsiyet, sınıf düzeyi, dil öğrenme stratejileri

1. Introduction

1.1. Language learning strategies

Many researchers have defined language learning strategies from various perspectives such as "language learning behaviors such as learning and regulating the meaning of a second language, learners' strategic knowledge of language learning, learners' motivations and attitudes, etc." (Wenden, 1987), "specific actions, behaviors, steps or techniques, such as seeking out conversation partners, or giving oneself encouragement to tackle a difficult language task used by students to enhance their own learning" (Scarcella and Oxford,1992, p. 63), "learning processes which are consciously selected by the learners and which result in action taken to facilitate the learning of a second or foreign language through the storage, retention, recall, and application of information about the language" (Cohen, 1998); "the steps or techniques applied to facilitate language learning" (Rigney, 1978; Rubin, 1987). Even though one of the most popular definitions attributed in the literature through the booming strategy research belongs to Oxford: "specific actions taken by the learner to make learning easier, faster, more enjoyable, more self-directed, more effective, and more transferrable to new situations" (1990, p.8), it is obvious that there is still no consensus in the field as to a single definition which would summarize different perspectives (Cohen, 1998; O'Malley & Chamot, 1990; Lee, 2010; Liu, 2010; Oxford, 1990; Scarcella & Oxford, 1992; Tseng, Dörnyei & Schmitt, 2006; Torres, 2013). Many theorists contributed to the definition and the studies of language learning strategies and their features from different perspectives, such as their goal-oriented function (Nisbet & Schucksmith, 1986; Oxford, 1990), their learnability and teachability (Oxford, 1990; Riding, 2000), voluntary-based application (Cohen, 1998; Oxford, 1990),) their purposefulness (Nisbet & Schucksmith, 1986; Riding & Rayner, 1998), their flexibility in use (Oxford, 1990; Riding & Rayner, 1998; their action-based side (Oxford, 1990) etc. Moreover, Pawlak and Oxford (2018) pointed out the need to focus more on a number of crucial topics in relation to the strategy use such as how language learning strategies were utilized in technology-mediated language learning environments and its relationship with the strategies, the use of strategies in learning the target culture, differences emerging in the strategic learning between the other languages (L2, L3 etc.), self-regulation and autonomy, self-directed learning in addition to methodological concerns.

The ongoing interest in the field might be because of the different and multifaceted aspects of the language learning strategies abovementioned in addition to their relatable and versatile feature in second language learning and teaching contexts. Because of this growing interest, complementing and extending overviews appeared in the last decade and seemed to continue (Amerstorfer & Oxford, 2018; Cohen, 2012; Cohen, 2014; Griffiths & Oxford, 2014; Cohen & Griffiths, 2015; Oxford, 2011; Oxford,

2017; Oxford & Amerstorfer, 2018; Pawlak, 2011). Oxford defined language learning strategies as "specific actions taken by the learner to make learning easier, faster, more enjoyable, more self-directed, more effective and more transferrable to new situations" and introduced her language learning strategy model (LLS) with 6 sub categories. Due to its being systematic and detailed (Vidal, 2002), its reliability and validity across diverse cultural contexts, its linkages with the reading, writing, speaking listening skills, vocabulary and grammar (Oxford and Burry-Stock, 1995), Oxford's language learning strategy classification was undertaken as a basis for the current study.

1.2. Oxford's six-category model (SILL)

The instrument which was used in this study, the Oxford's language learning strategy model (1990), introduced two main classes of strategy use: direct and indirect (See Table 1.1). Each category comes with three subgroups and differing number of items measuring the related strategy types. Direct strategies are divided into a) memory strategies, b) cognitive strategies, and c) compensation strategies Indirect strategies include a) meta-cognitive strategies, b) affective strategies and c) social strategies.

Table 1.1 Oxford's direct and indirect strategy groups and sets

Direct Strategies	Indirect Strategies
Memory Strategies	Meta-cognitive Strategies
Cognitive Strategies	Affective Strategies
Compensation Strategies	Social Strategies

According to Oxford (1990), language learning strategies require mental processing of the language, and the three subgroups of direct language learning strategies perform these mental processes in different ways. Memory strategies, for example, help learners store and retrieve new information by grouping and using imagery. Cognitive strategies lead learners to understand and produce new language by many different means, such as reasoning deductively or summarizing. Finally, compensation strategies let learners use the language by overcoming the knowledge gaps by guessing intelligently and limitations in speaking and writing.

Indirect strategies, on the other hand, function to support and manage language learning without actively involving that target language. Meta-cognitive strategies of the three subgroups of indirect strategies allow learners to control their own learning and coordinate it by themselves. Affective strategies help to regulate emotions, motivations and attitudes. Social strategies help learners' learning through interaction with others. In the current study, Oxford's six strategy model was used in examining the language learning strategy use of the Bosnian university students.

1.3. Relationship between gender academic major, grade levels and language learning strategies

Firstly, gender factor stands out among the variables affecting the use of language learning strategies. In this regard, Green and Oxford (1995) pointed out that the females use language learning strategies more frequently than the males in a Puerto Rican university. In addition, Dreyer and Oxford (1996) reported that the females used language learning strategies more frequently than the males did on the basis of data from 305 African university students.

In many studies no matter how much the cultural contexts differed, the results revealed that the females were as obviously more dominant and frequent users of the language learning strategies. For example, Oxford and Nykos in USA (1989), Punithavalli in Malaysia, Demirel in Turkey (2012) indicated the greater dominant preference of the females on the language learning strategies. Many other studies indicating similar female-dominant results on the language learning strategy use were also cited in the literature (Foong & Goh, 1997; Mochizuki,1999; Peacock & Ho, 2003; Punithavalli, 2003; Lan & Oxford, 2003; Khalil, 2005; Gürata, 2008; Cesur, 2008; Tahriri & Divsar, 2011; Gülsoy, 2011; Božinović & Sindik, 2011; Kayaoğlu, 2012; Doro & Habok, 2013; Yunus, Sulaiman & Amin, 2013; Özmen & Gülleroğlu, 2013; Kiram et al., 2014; Akın & Çetin, 2016; Mitits, 2014; Charoento, 2017; Javed & Ali, 2018). However, some studies found higher rates of male language learning strategy use in comparison to the females (Wharton, 2000; El-Dib, 2004; Abbasian, Khajavi & Mardani, 2012; Aliakbari & Hayatzadeh, 2008) even though the gender-based results of the language learning strategy use frequency were not statistically meaningful (Mullins, 1992; Kaylani, 1996; Vandergrift, 1997; Ed-Dib, 1999; Griffiths, 2003; Nisbet et al., 2005; Rahimi, Riyazi, Sahif, 2008; Psaltou-Joycey, 2008; Tahriri & Divsar, 2011; Gavriilidou & Papanis; 2010).

In most of those studies, the common finding was not just the females' tendency to use the language learning strategies more frequently and diversely than the males, but also the need for research in language learning strategy by employing qualitative methods to get a deeper insight. Even though the SILL gives a general framework of the language learning strategies, based on the findings in the literature, the need for further and detailed implication stemming from the structure and nature of SILL is the motivation behind this study.

Secondly, understanding the differences in academic majors and the multidisciplines that the students studied for a certain period of time have been a matter of interest for the researchers since research findings would have direct and indirect impacts on various perspectives. Relevantly, when it comes to language learning, academic major is also one of the highly attention-grabbing phenomena.

One of the pioneering studies about the relationship between academic major and language learning strategy use was conducted by Oxford and Nyikos (1989). They aimed to find the relationship between academic major and language learning strategy use. They asked the tendencies of strategy use to 1200 foreign language students by employing an early version of Strategy Inventory for Language Learning (SILL) at an American university. 50% of the participants were from the departments of engineering, physical sciences and computer sciences, 35% from social sciences and humanities and education and 15% from business and the other disciplines. They found a significant relationship between the language learning strategy use and academic major. Students majoring in social sciences, education and humanities tended to use strategies leading language practice outside the classroom. Basically, memorizing, planning, self-testing, and self-award were the strategies which were used significantly more often than the students majoring in the other departments.

Another researcher Rong (1999) carried out a study in the Chinese context where 265 junior university students from three different Chinese universities majoring in English (2.8%), arts (35.5%) and science (31%) participated. Rong found that the responses to the Chinese adapted version of SILL (Oxford, 1990) showed that the students preferred different strategies depending on their majors. Students studying in English used more strategies than those in other departments. They also preferred mainly social, compensation, cognitive and affective strategies.

Similarly, Mochizuki (1999) found a very consistent result with Rong (1999) in his study among the Japanese university students. In this study, 44 sophomores from the English Department at the Faculty of Education and 113 freshmen from the other departments of the Faculties of Science and Agriculture from a state university in Japan participated. In the comparison of students from English and the other departments, students of English tended to use more frequent and diverse language learning strategies (i.e. metacognitive strategies, compensation strategies and social strategies).Peacock (2001) wanted to find out the impact of the academic major in terms of the language learning strategy use by utilizing SILL among 140 Hong Kong university students. The students were studying math, science, and engineering. He reported significantly different strategy type uses among the students from different departments. But this meaningful difference was not observed at individual strategies.

Some other researchers studying this relation found similar results. For example, Rao and Liu (2011), studying the effect of academic major on students' use of language learning strategies in a Chinese context, found that students in different academic majors tended to reflect similarities rather than differences. They did not find this result as surprising because of the previous results found in the Chinese context. According to Rao and Liu's previous study (2006), Chinese students reflected some common patterns in their strategy use. However, they found that the social science students differed from the science students in their use of some of the strategies. They interpreted that these differences stemmed from some factors such as course structures and teaching contexts within different majors.

Along with the studies indicating the significant impact of academic major on the use of language learning strategies, there are also a few research findings which indicated a non-significant relationship between them (Mullins, 1992; Wharton 2000).

Regarding the last variable of the current study with regard to the language learning strategy use**,** previous studies have been held from different perspectives such as the course level, years of language learning, the educational level. Of those studies, for example, Ok (2003) carried out a study to find out the differences between grade levels and language learning strategy use of 325 Korean learners from 3 secondary schools. Even though he did not find a correlation with the overall strategy use, in terms of the strategy type employed, juniors preferred compensation and memory strategies while freshmen preferred cognitive, metacognitive, social and affective strategies more frequently.

Regarding the grade levels and language learning strategies, Ghrib (2004) also found significant differences between the 6th and 7th grades in terms of the strategy type and frequency use by 130 Tunisian secondary school students. While 6th grade students employed avoidance, resourcing, borrowing and translation strategies more, 7th grade students employed affective, circumlocution, social, paraphrase and simplification strategies.

In another context, Tahriri and Divsar (2011) studied the relationship between grade level and language learning strategies among the Iranian university students. He found that sophomores showed a higher strategy use of memory strategies and juniors preferred cognitive strategies more. But juniors and sophomores used compensation strategies more than seniors. Seniors also had the highest scores of the metacognitive strategy use, that of which was followed by the sophomores. Juniors used strategies more frequently than the other grade levels.

No matter the cultures and population changed, most of the stuies indicated a significant relationship between the language learning strategy use and individual differences as pointed out above. By assuming the other possible factors influencing the language learning process, different quantitative and qualitative research in language learning strategy use are in need.

2. Method and Data Analysis Procedure

2.1. Design of the study

In this study, a quantitative method was used to investigate the differences between genders, academic majors and grade levels on the use of language learning strategies of EFL Bosnian university students. An Individual Background Questionnaire (IBQ) and Strategy of Language Learning Inventory (SILL) were presented to Bosnian university students. To analyze the collected quantitative data, several statistical procedures, including descriptive statistics, Cronbach alpha test and multivariate analysis of variance (MANOVA) test were conducted.

2.2. Research questions

This study aimed to find out answers to the following questions:

a. Are there any significant differences between males and females in terms of language learning strategy use among Bosnian university students?

b. Are there any significant differences between academic majors in terms of language learning strategy use among Bosnian university students?

c. Are there any significant differences between grade levels of education in terms of language learning strategy use among Bosnian university students?

d. Which language learning strategies are used most frequently by the Bosnian university students?

2.3. Instrumentation

This study consisted of two measurements in total: an Individual Background Questionnaire (IBQ) to gather demographic information about the participants and the Strategy Inventory for Language Learning (SILL) (Oxford, 1990). To ensure the accuracy of the results, the SILL was translated into the Bosnian language. A pilot study including 50 students were carried out to establish the reliability and validity of the instruments. The IBQ was developed by the researcher.

SILL is a self-report measuring the frequency of language learning strategy use by adult L2 learners (Oxford, 1990). The version for speakers of other languages learning English (version 7.0) was employed. For this study, an adaptation of version 7.0 into Bosnian was used. The SILL is rated on a five-point Likert scale system for each personal trait ranging from 1 to 5: 1) never or almost never true of me, 2) generally not true of me, 3) somewhat true of me, 4) generally true of me, 5) always or almost true of me. Each participant had an overall score of frequency of strategies and six specific frequency average scores of six strategy groups, respectively. Based on the score profiles of the participants, they were scored from 1.0 to 5.0 to indicate the frequency of the strategies used for English learning. SILL 7.0 (50 items) has a division of two main categories (direct and indirect strategies) and six strategy sub-groups under direct: memory (9 items), cognitive (14 items), compensation (six items), and indirect strategies: meta-cognitive (nine items), affective (six items) and social (six items) (Oxford, 1990).

2.4. Participants and demographic characteristics

In this study, 252 Bosnian students at differing ages from 18 to 26 and from 8 various departments of an international university in Sarajevo participated the study on voluntary basis. To be able to study at a department at this university whose medium of instruction is English, every student must have at least B2 level of English. Students who do not have the required B2 level have to attend to prep school to reach this level.

Demographic information about the participants was collected by employing IBQ. In addition to IBQ, the SILL (Oxford, 1990) was given to the participants. These self-report questionnaires were attached and packed together. Each student completed the IBQ, which asked for the gender, major, and grade level of 252 Bosnian students. As shown in Table 2.1 below, the sample of this part consisted of 108 male (42.9%) and 144 female students (57.1%).

Table 2.1 Distribution of participants by gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Males	108	42.9	42.9	42.9
	Females	144	57.1	57.1	100.0
	Total	252	100.0	100.0	

All the participants were divided into 3 groups according to their faculties; 77 students (30.5 %) from Faculty of Education (FE), 26 students (50%) from Faculty of Engineering and Information Technologies (FEIT) and 49 students (19.5%) from Faculty of Economy and Social Sciences (FES) (see Table 2.2).

Table 2.2 Distribution of participants by academic major

	Major	**Frequency**	**Percent**	**Valid Percent**	**Cumulative Percent**
Valid	FE	77	30.5	30.5	30.5
	FEIT	126	50	50	50
	FES	49	19.5	19.5	19.5
	Total	252	100.0	100.0	100.0

Students were grouped into three as freshmen (116 students - 46.00%) , sophomores (110 sophomores (43.7 %) and juniors (26 students - 10.3%) (See Table 2.3).

Table 2.3. Distribution of participants by grade level

Valid	**Grade Level**	**Frequency**	**Percent**	**Valid Percent**	**Cumulative Percent**
	Freshmen	116	46.0	46.0	46.0
	Sophomores	110	43.7	43.7	43.7
	Juniors	26	10.3	10.3	10.3
	Total	252	100.0	100.0	100.0

2.5. Data analysis

In this part, the analysis of the collected data was presented. Statistical Package for the Social Sciences (SPSS) for Windows, version 20.0, was utilized to analyze the quantitative data. To ensure the reliability, Cronbach's alpha reliability test was used for the six groups of language learning strategies. In order to test the reliability, Cronbach Alpha test was conducted. The results indicated a high reliability (α=.79). That indicated that scores were reasonably consistent. On the level of strategy type, moderately high reliability was also shown in memorystrategies (α=.702), cognitive strategies (α=.798), compensation strategies (α=.561), meta-cognitive strategies (α=.864), affective strategies, (α=.594) and social strategies (α=.809) (See Table 3.1).

Table 3.1 Six strategy groups: Reliability statistics

Strategy Group	**Cronbach's alpha**
Memory Strategies	.702
Cognitive Strategies	.798
Compensation Strategies	.561
Meta - cognitive Strategies	.864
Affective Strategies	.594
Social Strategies	.809

Next, descriptive statistics were reported as means, standard deviations and frequencies of the demographic background information of the participants (grade levels, majors, gender) and the language learning strategies. Multivariate analysis of variance (MANOVA) was used to identify the differences between genders, academic majors, grade levels and language learning strategy uses. This is a type of multivariate analysis used to analyze data that involve more than one dependent variable at a time. It allowed us to test the effect of those variables in the current study.

3. Results

3.1. Frequency of language learning strategies

In order to analyze the strategy use of the Bosnian learners across six groups of strategies, the second quantitative instrument, SILL, which was composed of 50 items, was utilized. A descriptive analysis was conducted using the SPSS 20.0 version.

Based on Oxford's (1990) scale of strategy use, the levels of participants' use of strategies were sorted into three groups: high (3.5 -5.0), medium (2.5 – 3.4), and low (1.0 – 2.4). According to this division, Table 5 indicates the degree of overall strategy use among the Bosnian university students in this study. The participants stated that they used all different types of strategies at differing levels. From the most preferred type to the least preferred were: Social strategies (71.4 %), cognitive strategies (65.4 %), meta-cognitive strategies (60.7 %), compensation strategies (53.5%), affective strategies (26.1 %), and memory strategies (20.4 %) (See Table 3.2).

Table 3.2. Overall strategy use: Frequencies and percentages

Frequency of Strategy Use	**Memory Strategies**		**Cognitive Strategies**		**Compensation Strategies**		**Metacognitive Strategies**		**Affective Strategies**		**Social Strategies**	
	Frequency (*n*)	Percent (%)	Frequency (*n*)	Percent (%)	Frequency (*n*)	Percent (%)	Frequency (*n*)	Percent (%)	Frequency (*n*)	Percent (%)	Frequency (*n*)	Percent (%)
High (3.5 ≤ M ≥ 5.0)	51	20.4	165	65.4	135	53.5	153	60.7	66	26.1	180	71.4
Medium(2.5 ≤M≥3.4)	166	65.8	79	31.3	106	42.0	90	35.7	141	55.9	60	23.8
Low (1.0 ≤ M ≥ 2.4)	35	13.8	8	3.1	11	4.3	9	3.5	45	17.8	12	4.7

As shown in table 3.3, the participants reported that they used all the strategies at the medium level. The highest means of the strategies were shown for the use of social strategies (*M* =3.83, *SD* =.77). The lowest means belonged to the affective strategies (*M* =3.0, *SD* =.68).

Table 3.3 Frequency of strategy use across students

Strategy	**Mean**	**Std. Deviation**	**N**
Memory Strategies	3.1402	.61552	252
Cognitive Strategies	3.6026	.59053	252
Compensation Strategies	3.4881	.63632	252
Metacognitive Strategies	3.7156	.71391	252
Affective Strategies	3.0000	.68968	252
Social Strategies	3.8386	.77732	252

3.2. Differences between males and females in terms of six strategy groups

Concerning the gender differences in the six strategy groups, a one-way between groups MANOVA was performed. The dependent variables were memory strategies, cognitive strategies, compensation strategies, meta-cognitive strategies, affective strategies, and social strategies, while the independent variable was gender. Preliminary assumption testing was conducted to check for normality, linearity, univariate and multivariate outliers, homogeneity of variance-covariance matrices, and multi-collinearity. No serious violations were noted. There was a statistically significant difference between the males and females on the dependent variables: F (6,245) = 2.136, p = .050, Wilks' Λ = .950. Depending on the partial eta square score, the effect size statistic of the six groups of language learning strategies for gender was found to be 5% (η^2 = .050) (See Table 3.4).

Table 3.4 Effects of gender on six strategy groups: MANOVA results

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	PartialEta Squared
Corrected Model	Memory Strategies	.925[a]	1	.925	2.395	.123	.009
	Cognitive Strategies	2.907[b]	1	2.907	8.642	.004	.033
	Compensation Strategies	.068[c]	1	.068	.188	.665	.001
	Metacognitive Strategies	2.520[d]	1	2.520	5.084	.025	.020
	Affective Strategies	.296[e]	1	.296	.651	.421	.003
	Social Strategies	4.138[f]	1	4.138	7.052	.008	.027

Note: a. R Squared = ,009 (Adjusted R Squared = ,006); b. R Squared = ,033 (Adjusted R Squared = ,030); c. R Squared = ,001 (Adjusted R Squared = -,003); d. R Squared = ,020 (Adjusted R Squared = ,016); e. R Squared = ,003 (Adjusted R Squared = -,001); f. R Squared = ,027 (Adjusted R Squared = ,024)

The main statistically significant difference was found (Table 3.5) on cognitive strategies (p = .004). Table 3.5 indicated the means and standard deviations for gender. On the use of cognitive strategies, the male students (M = 2.507, SD = .590) showed a significantly higher level than the females (M = 2.290, SD = .572). The second highest significant difference was found on social strategies in gender (p = .008). On the use of social strategies, the male students (M = 2,307, SD = .765) showed a statistically significant higher level of what? than the females (M = 2,048, SD = .766). The next statistically significant difference was on meta-cognitive strategy use with respect to gender (p = .25). On the use of meta-cognitive strategies, the male students (M = 2,390, SD = .745) showed a significantly higher level of what ?? than the females (M = 2,188, SD = .671).

Table 3.5 Frequency of strategy use across students

	Gender	Mean	Std. Deviation	N
Memory Strategies	Males	2.9079	.63225	108
	Females	2.7855	.61311	144
Cognitive Strategies	Males	2.5075	.59015	108
	Females	2.2905	.57229	144
Compensation Strategies	Males	2.4960	.59783	108
	Females	2.5292	.60467	144
Metacognitive Strategies	Males	2.3904	.74578	108
	Females	2.1884	.67108	144
Affective Strategies	Males	3.0241	.71290	108
	Females	2.9549	.64360	144
Social Strategies	Males	2.3071	.76535	108
	Females	2.0481	.76655	144

3.3. Differences between academic majors in terms of six strategy groups

Regarding the academic major differences in the six strategy groups, there was a statistically significant difference among the academic majors of the students on the dependent variables: F (12.488) =4.869, p<.001, Wilks' Λ=.798. Depending on the partial eta square score, the effect size

statistics of the six groups of language learning strategies on the major is found to be 10% ($\eta^2 = .107$). So?

According to the MANOVA results, there was a statistically significant difference between academic majors for five strategy groups: memory strategies ($p < .001$); cognitive strategies ($p < .001$); meta-cognitive strategies ($p < .001$); affective strategies ($p < .001$), and social strategies. On the other hand, there are no statistically significant differences in compensation strategies by academic major (See Table 3.6).

Table 3.6 Effects of academic major on six strategy groups: MANOVA results

Source	**Dependent Variable**	**Type III Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**	**Partial Eta Squared**
Corrected Model	Memory Strategies	6.483[a]	2	3.242	8.873	.000	.067
	Cognitive Strategies	8.217[b]	2	4.109	12.984	.000	.094
	Compensation Strategies	1.937[c]	2	.968	2.720	.068	.021
	Metacognitive Strategies	18.452[d]	2	9.226	21.275	.000	.146
	Affective Strategies	7.216[e]	2	3.608	8.420	.000	.063
	Social Strategies	12.321[f]	2	6.160	11.074	.000	.082

Note: a. R Squared = ,067 (Adjusted R Squared = ,059); b. R Squared = ,094 (Adjusted R Squared = ,087); c. R Squared = ,021 (Adjusted R Squared = ,014); d. R Squared = ,146 (Adjusted R Squared = ,139); e. R Squared = ,063 (Adjusted R Squared = ,056); f. R Squared = ,082 (Adjusted R Squared = ,074)

In order to investigate multiple comparisons, post hoc comparisons using Tukey's HSD were conducted. Table 3.7 represented the means and standard deviations of strategy use based on the academic majors. According to these results, the students from the Faculty of Economics ($M = 2.984$, $SD = .585$) showed the highest level of use of memory strategies in comparison to the students in the other faculties (Faculty of Education: $M = 2.598$, $SD = .630$; Faculty of Engineering: M = 2.927, $SD = .595$). Students from the Faculty of Engineering ($M = 2.514$, $SD = .614$) showed the highest level of use of cognitive strategies in comparison to those in the other faculties (Faculty of Education: $M = 2.112$, $SD = .521$; Faculty of Economy: $M = 2.472$, $SD = .476$). Students from the Faculty of Engineering ($M = 2.496$, $SD = .754$) showed the highest level of use of meta-cognitive strategies in comparison to those in the other faculties (Faculty of Education: $M = 1.878$, $SD = .567$; Faculty of Economy: $M = 2.328$, $SD = .476$). Students from the Faculty of Economy ($M = 2.953$, $SD = .547$) showed the highest level of use of affective strategies in comparison to the other faculties. (Faculty of Education: $M = 2.751$, $SD = .709$; Faculty of Engineering: $M = 2.313$, $SD = .657$). Students from the Faculty of Economy ($M = 2.379$, $SD = .629$) showed the highest level of use of social strategies in comparison to the other faculties. (Faculty of Education: $M = 1.831$, $SD = .709$; Faculty of Engineering: $M = 2.273$, $SD = .847$).

Table 3.7 Six strategy groups by academic major: means and standard deviations

	Major_Faculties	**Mean**	**Std. Deviation**	**N**
Memory Strategies	FE	2.5983	.63034	77
	FES	2.9847	.58539	49
	FEIT	2.9273	.59547	126

Cognitive Strategies	FE	2.1123	.52199	77
	FES	2.4724	.47670	49
	FEIT	2.5147	.61433	126
Compensation Strategies	FE	2.4242	.71100	77
	FES	2.6776	.49798	49
	FEIT	2.5071	.55378	126
Metacognitive Strategies	FE	1.8782	.56787	77
	FES	2.3282	.50545	49
	FEIT	2.4967	.75477	126
Affective Strategies	FE	2.7519	.70953	77
	FES	2.9531	.54759	49
	FEIT	3.1389	.65751	126
Social Strategies	FE	1.8312	.62624	77
	FES	2.3796	.62951	49
	FEIT	2.2738	.84708	126

3.4. Differences between grade levels in terms of six strategy groups

With regard to the grade level of education differences on the six strategy groups, a one-way between-groups multivariate analysis of variance was performed. The dependent variables were memory strategies, cognitive strategies, compensation strategies, meta-cognitive strategies, affective strategies, and social strategies, while the independent variable was the level of education of the students. MANOVA results showed that there is no statistically significant difference in the level of education for the six groups of language learning strategies (Wilk's Λ= .970, F (12.488) = .634, p = .814) although freshmen showed the highest level of strategy use of all groups (See Table 3.8).

Table 3.8 Effects of grade level on six strategy groups: MANOVA results

Source	**Dependent Variable**	**Type III Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**	**PartialEta Squared**
Corrected Model	Memory Strategies	.993[a]	2	.497	1.282	,279	,010
	Cognitive Strategies	1.259[b]	2	.629	1.827	,163	,014
	Compensation Strategies	.322[c]	2	.161	.445	,642	,004
	Metacognitive Strategies	1.045[d]	2	.523	1.038	,356	,008
	Affective Strategies	2.035[e]	2	1.018	2.265	,106	,018
	Social Strategies	.798[f]	2	.399	.662	,517	,005

Note: a. R Squared = ,010 (Adjusted R Squared = ,002); b. R Squared = ,014 (Adjusted R Squared = ,007); c. R Squared = ,004 (Adjusted R Squared = -,004); d. R Squared = ,008 (Adjusted R Squared = ,000); e. R Squared = ,018 (Adjusted R Squared = ,010); f. R Squared = ,005 (Adjusted R Squared = -,003)

Additionally, grade level of education showed no statistically significant difference on strategy use: memory strategies (p = .279); cognitive strategies (p = .163); compensation strategies (p = .642);

meta-cognitive strategies (p = .356); affective strategies (p = 106); and social strategies (p=.517) (See Table 3.9).

Table 3.9 Six strategy groups by level of education: means and standard deviations

	Grade Level	**Mean**	**Std. Deviation**	**N**
Memory Strategies	1st Year	2.9012	.65090	116
	2nd Year	2.7992	.56906	110
	3rd Year	2.7196	.70538	26
Cognitive Strategies	1st Year	2.4597	.62345	116
	2nd Year	2.3225	.53768	110
	3rd Year	2.3014	.61767	26
Compensation Strategies	1st Year	2.5526	.62590	116
	2nd Year	2.4773	.58501	110
	3rd Year	2.5064	.56269	26
Metacognitive Strategies	1st Year	2.3309	.75081	116
	2nd Year	2.2527	.68091	110
	3rd Year	2.1197	.63318	26
Affective Strategies	1st Year	3.0773	.68243	116
	2nd Year	2.9233	.65834	110
	3rd Year	2.8295	.66562	26
Social Strategies	1st Year	2.2063	.88372	116
	2nd Year	2.1424	,68098	110
	3rd Year	2.0192	,62241	26

Finally, the data analysis was given place in terms of the academic major, gender and grade level in relation to the language learning strategy use in this part of the study. In the light of the analysis, findings were discussed in the next part.

4. Discussion

According to the results of this study, the Bosnian university students who participated in this study used language learning strategies frequently. The degree of overall strategy use among them in this study was found that from the most preferred type to the least preferred ones were: Social strategies (71.4 %), cognitive strategies (65.4 %), meta-cognitive strategies (60.7 %), compensation strategies (53.5%), affective strategies (26.1 %), and memory strategies (20.4 %).

In this study, the males used language learning strategies more than the females. They employed cognitive, social and metacognitive strategies more often than the females. This result is contradictory with many previous findings, which reported higher and more frequent use of language learning strategies by the females (Foong &Goh, 1997; Mochizuki,1999; Peacock &Ho, 2003; Punithavalli, 2003; Lan &Oxford, 2003; Khalil, 2005; Gürata, 2008; Cesur, 2008; Gülsoy, 2011, Božinović &Sindik, 2011; Tahriri &Divsar, 2011; Demirel, 2012; Kayaoğlu, 2012; Özmen &Gülleroğlu, 2013; Yunus,

Sulaiman &Embi, 2013; Mitits, 2014; Kiram et al., 2014; Akın &Çetin, 2016; Charoento, 2017; Javed &Ali, 2018)

Our finding is in accordance with the findings of some other studies. Interestingly, the other researchers who found males to be frequent users of strategies also indicated socio-economic conditions in their results. For example, Tang's study (1988), which was conducted among the Vietnamese immigrants to the United States, indicated that male immigrants used more strategies than females. This similar finding may be explained by the socio- economic role of males, who are mostly in charge of earning money. In order to survive and adapt to the migrated countries, they might be aware of the importance of language learning. These obligations may be leading them to activate foreign language knowledge and utilize it. Another similar finding in Kuwait explained the males' high and diverse language strategy use with the opportunities to socialize with speakers of English in society and freedom to travel, communicate, go to movies while females in a conservative society may only use language learning strategies in classrooms mostly (El-Dib, 2004).

Interestingly and contradictory with the previous studies, students of Faculty of Education were the lowest frequent user of language learning strategies of all six types. Considering the academic obligations and future career concerns of students studying at these faculties may be helpful to understand the reasons of these significant differences. Students of Faculty of Economy scored higher in memory, affective and social strategies. Using language by creating images, linkages etc, contextualizing words, associating the issues , reviewing after long intervals , responding physically or mechanically, controlling the emotions, motivating himself/herself by positive statements or rewards, risk taking, demanding clarification or correction, cooperating with others and making effort to develop cross cultural understanding, which are all a series of memory, affective and social strategies might be helpful and to get a deeper understanding in the core issues such as international relations, economy and management etc. of those students. The preference of cognitive and metacognitive strategy types by the students of Faculty of Engineering can be explained for their academic needs in information processing and orientation with technology-based self-study habits. The lower strategy use among the students of Faculty of Education, which has English Language and Literature and Oriental Philology Departments might be explained with the adverse effect of formal education. Being involved in a linguistic, literary and language teaching context and formal education based on the theoretical and pedagogical knowledge and instruction might be discouraging the students to practice the strategies. They might be more concerned with the forms and functions of the strategies to teach rather than pragmatic uses to satisfy their communicational needs in daily life like the students of the other majors.

These findings meet at the common points of the findings of previous researches to some extent. A majority of the previous findings found a statistically significant difference between academic majors on the employment of certain types of strategies (Politzer and McGroaty, 1985; Reid, 1987; Oxford and Nykos, 1989; Chou, 2002; Gu, 2002; Peacock and Ho, 2003; Kang, 2012). However, there are some studies which found no significant difference between the academic majors on strategy use (Wharton, 2000). The findings about the students of faculty of engineering and informational technologies were not in accordance with some other studies, which found lower scores for students of that field in the use of strategies (Politzer and McGroarty, 1985; Oxford and Nykos, 1989).

Regarding the frequency of language learning strategies, this study found no significant differences between grade levels. Due to the sample characteristics and many other factors, the result should not

be generalized. Through sampling from people of different educational backgrounds and ages, there may be significant findings. It was implied that educational duration at university did not play any role on the language strategy preference of the learners.

Although language learning strategy use studies took place more than four decades, particularly since 2010s, those studies examining the variables upon the LLS by Oxford were criticized seriously. For example, Rose (2012) uses the analogy of throwing the baby out with the bathwater to discuss the notion of thousands of published research articles on language learning strategies (LLS) over the past 30 years being discarded in the face of self-regulation. Moreover, instead of LLS some other approaches emerged such as Tseng, Dörnyei, and Schmitt's (2006) model of selfregulation based on Dörnyei's (2005) motivation control taxonomy, Weinstein's (2009) model of strategic learning, and Oxford's (2011) model of Strategic Selfregulation.

5. Implications and recommendations

The findings of this study set forth several important implications for language learning and teaching and provided an insight into the differences between individuals in the Bosnian language education system. English, as an international system, is required not just by global educational practices and businesses but also, in Bosnia and Herzegovina, it's one of the keys to keep up with modern educational movements and compete in diverse business sectors. As a mid-European country, Bosnia and Herzegovina has traits of both eastern and western cultures. Through the intensive impact TV programs and media, etc., the openness of Bosnian culture to differences has grown and improved.

These relationships bring about a combination of the similarities or discrepancies, which are evoked by technology. The world is getting smaller and smaller each day. A primary tool for minimizing the world and turning it into a village is the fact of communication technologies. In this country, the use of subtitles on most of the TV programs seems to play a great role in the foreign language learning perspectives of Bosnians. High awareness of the possibility of learning a foreign language through TV subtitles is something ordinary and even sometimes obligatory thing for a typical Bosnian. There are soap operas and various TV shows from Latin America, Germany, the USA, Turkey, England, and India. When compared with the local media show productions, foreign ones are observably dominant in the country. Series bring about a longitudinal curiosity, and repeated sayings in the episodes, which facilitate learning. Because of the war in this region between ex-Yugoslavian countries, many people immigrated to different countries, and by the end of the war some returned and some stayed away. This process led people to learn the languages of those countries as well.

The findings of this study provide insights for the Bosnian educational system. High use of cognitive, meta-cognitive, and social strategies of Bosnian students necessitate reform of formal English instructions, classroom situations, teaching materials, and curricula. Teaching contexts should be re-considered according to the needs of the students, to which this current study pictures a general understanding of the characteristics of Bosnian EFL learners in terms of their strategy preferences. It is believed that the findings of this study will be very beneficial for the language policy makers and curriculum designers.

As well as the changing role of the teachers, as stated before, the changing role of students and how important their individual differences are should be taken into account in preparation of the teaching and learning process. According to the individual differences, diverse approaches to learning

outcomes, learning attitudes, and behaviors in the learning tasks should be re-interpreted. In the classical approach, regarding classroom management, keeping learners under control was seen as a positive aspect of the teaching environment. However, students who have a higher tendency of autonomous language learning through strategy employment at a high level, should not be expected to learn in a teacher-bound atmosphere. If teachers can accommodate individual differences without prejudice, they can make use of them and contribute to students' self-development. In this regard, studies of the individual differences in language learning like the current study is continuously required.

When the students are given right instruction for the effective use of language strategies, they could discover how to use them according to their own individual characteristics. In this study, the least preferred and less correlating strategy type was compensation strategies. The reasons for this finding can be scrutinized later, but one primary reason could be the lack of explicit strategy instruction, which might be again related to the changing role of teachers in the classroom. No longer are they expected to transmit knowledge to students, but rather to activate their own learning skills, leading, guiding, and facilitating it. Awareness of the individual differences and accompanying with them is believed to activate the learner autonomy and bring the learner identity on stage more actively.

Based on the findings of this study, through the continuous alive process of language learning, students from different academic major should be trained not just for their field but also for language learning strategy use. There are some studies developed to fulfil that need by the researches; the Cognitive Academic Language Learning (CALLA) by Chamot and O'Malley (1986) based on content-based instruction, explicit learning strategy instruction and academic-language development, the Australian Migrant English Program (AMEP) developed by Willing (1989) based on strategy education in learning process and CLIL (Content and Language Integrated Learning) by Marsh (1994) based on learning and teaching foreign language through the target subject matter in different disciplines. In order to go along with this need, training teachers in delivering strategy use is needed. Thus, it involves giving instructions to students to apply or practice strategies in their own language learning process through regular classroom activities. Such a strategy based instruction can be incorporated into the curriculum of the all levels of education and in different majors.

Regarding the teaching materials, the least and most used strategy types and their correlations with individual differences can be examined. The least preferred strategy is memory while the most preferred one is social strategies. In Bosnian society, high awareness of foreign cultures and foreign language learning can be helpful to keep students' interests in classes. They enjoy learning with a booming interest for the cultural differences and they like empathizing with others' thoughts and feelings. It is seen that they learn by interacting with each other. Teachers might prepare classroom activities more for these tendencies and avoid more from the memorization related activities or tasks. Group activities and cooperative learning materials would be ideal for those learners.

Strategic thinking and practicing in language learning among the Bosnian university students was confirmed in this study. Significant differences were found between individual differences and language learning strategies. Encouragement by the teachers to improve this strategic approach of the students is important for language instructors.

References

Abbasian, R., Khajavi, Y. & Mardani, A. (2012). Language learning strategies of Iranian EFL learners: Are gender and educational level important? *Academic Research International, Vol. 3*(2) Retrieved from http://www.savap.org.pk/journals/ARInt./Vol.3(2)/2012(3.2-46).pdf

Akın, H. & Çetin, M. (2016). Cinsiyet Faktörünün Yabancı Dil Olarak Türkçe Öğrenim Stratejilerine Etkisi (Bosna Hersek Örneği). *Uluslararası Türkçe Edebiyat Kültür Eğitim Dergisi, 5(*2), 1021-1032.

Aliakbari, M. & Hayatzadeh, A. (2008). Variation of language strategies among Iranian English students: The effect of gender. *International Journal of Pedagogies and Learning, 4*(3)*,* 72-87.

Boẓinović, N. & Sindik, J. (2011). Gender differences in the use of learning strategies in adult foreign language learners. *Metodički obzori 6*(1).

Cesur, O. (2008). *Üniversite hazırlık sınıfı örgencilerinin yabancı dil öğrenme stratejileri, öğrenme stili tercihi ve yabancı dil akademik başarısı arasındaki açıklayıcı ve yordayıcı ilişkiler örüntüsü.* Unpublished Ph.D. Thesis, Yıldız Teknik University, İstanbul.

Chamot, A. U. & O'Malley, J. (1986). *A cognitive academic language learning approach: An ESL content-based curriculum.* Washington, DC: National Clearinghouse for Bilingual Education.

Charoento, M. (2017). Individual Learner Differences and Language Learning Strategies. *Contemporary Educational Researches Journal.* 7(57) Doi: 10.18844/cerj.v7i2.875.

Chou, Y. (2002). *An exploratory study of language learning strategies and the relationship of these strategies to motivation and language proficiency among EFL Taiwanese technological and vocational college students*. PhD Dissertation. University of Iowa.

Cohen, A. & Griffiths, C. (2015) Revisiting LLS research 40 years later. TESOL *Quarterly, 49*, 414-429.

Cohen, A. (1998a). *Strategies in learning and using a second language.* Harlow: Longman.

Cohen, A. (2012b). L2 learner strategies. In E. Hinkel (Ed.) *Handbook of research in second language teaching and learning, Vol: 2*, 681-698. London and New York: Routledge.

Cohen, A. (2014c). *Strategies in learning and using second language*. London and New York: Routledge.

Demirel, M. (2012). Language learning strategies of undergraduate students. *Hacettepe University Journal of Education, 43,* 141-153.

Doró, K. & Habók, A. (2013). Language learning strategies in elementary school: The effect of age and gender in an EFL context. *Journal of Linguistics and Language Teaching, 4*(2), 24-37.

Dreyer, C. & Oxford, R. L. (1996) Learning Strategies and other predictors of ESL proficiency among Afrikaans speakers in South Africa. In Rebecca Oxford (ed.), *Language learning strategies around the world: Cross-cultural perspectives*. Tech. Rep. No. 13, 61-74. Honolulu, HI: University of Hawai Press.

El-Dib, M. (1999a). Male/Female differences in language learning strategies reconsidered. *Journal of the Faculty of Language and Translation Studies, AL Azhar University, 30*, 1–24.

El-Dib, M. (2004b). Language learning strategies in Kuwait: Links to gender, language level and culture in a hybrid context. *Foreign Language Annals, 37,* 85-95.

Gavriilidou, Z. & Papanis, A. (2010). The effect of strategy instruction on strategy use by Muslim pupils learning English as a second language. *Journal of Applied Linguistics, 25*, 47–63.

Foong, K. P. & Goh C. (1997). Chinese ESL students' learning strategies: A look at frequency, proficiency, and gender. Hong Kong. *Journal of Applied Linguistics, 2(1),* 39-53.

Green, J. M. & Oxford, R. L. (1995). A closer look at learning strategies, L2 proficiency, and gender. *TESOL Quarterly, 29(2),* 261-297.

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Griffiths, C. & Oxford, R. L. (2014). The twenty first century landscape of language learning strategies: Introduction to this special issue. *System, 43,* 1-10.

Griffiths, C. (2003) Patterns of language learning strategy use. *System: An International Journal of Educational Technology and Applied Linguistics, 31,* 376-383.

Gu, Y. (2002). Gender, Academic Major, and Vocabulary Learning Strategies of Chinese EFL Learners. *RELC Journal, 33,* 135-154, doi: 10.1177/003368820203300102.

Gülsoy, D. (2011). *İngilizce okutmanlarının ve hazırlık sınıfı öğrencilerinin dil öğrenme stratejilerinin kullanımına ve öğretimine ilişkin görüşleri.* (Unpublished MA thesis). Hacettepe University, Ankara.

Gürata, A. (2008). *The grammar learning strategies employed by Turkish university preparatory school EFL students.* (Unpublished MA Thesis). Bilkent University, Ankara.

Javed, M. & Ali, A. (2018). Analyzing the use of language learning strategies among high and low achievers. *Journal of Research and Reflections in Education*, 12(1), 25-44.

Kang, S. (2012). *Individual differences in language acquisition: personality traits and language learning strategies of Korean university students studying English as a foreign language* (Unpublished doctoral dissertation). Indiana State University, Indiana.

Kayaoğlu, M. N. (2012). Gender-based differences in language learning strategies of science students. *Journal of Turkish Science Education, 9(2*), 12-24.

Kaylani, C. (1996). The influence of gender and motivation of EFL learning strategy use in Jordan. In Rebecca Oxford, (ed.) *Language learning strategies around the world: cross-cultural perspectives*, (pp. 75-88). Honololu: University of Hawai'i: Second Language Teaching and Curriculum Center.

Khalil, A. (2005). Assessment of language learning strategies used by Palestinian EFL learners. *Foreign Language Annals, 38(1),* 108-119. http://dx.doi.org/10.1111/j.1944-9720.2005.tb02458.x

Kiram, J. J., Sulaiman, J., Swanto, S. & Din, W. A. (2014). The relationship between English language learning strategies and proficiency of pre-university students: A study case of UMS. *AIP Conference Proceedings, 1605(1),* 775-780).

Lan, R. & Oxford, R. L. (2003). Language learning strategy profiles of elementary school students in Taiwan. *IRAL, 41,* 339–379

Lee, C. K. (2010). An overview of language learning strategies. *ARECLS, 7,*132-152.

Liu, Y. (2010) Social media tools as a learning resource. *Journal of Educational Technology Development and Exchange, 3(1),* 101-114.

Marsh, D. (1994). *Bilingual Education and Content and Language Integrated Learning*. Paris: International Association for Cross-cultural Communication, Language Teaching in the Member States of the European Union (Lingua), University of Sorbonne.

Mitits, L. (2014). *Language learning strategy use by early adolescent monolingual EFL and multilingual EFL/L2 Greek learners in the Greek educational context.* Unpublished doctoral dissertation, Democritus University of Thrace, Komotini, Greece

Mochizuki, A. (1999). Language learning strategies used by Japanese university students. *RELC, 30,* 101-113.

Mullins, P. Y. (1992). *Successful English Language Learner Strategies of Students Enrolled in the Faculty of Arts, Chulalongkorn University, Bangkok, Thailand.* Unpublished doctoral dissertation. San Diego, CA: United States International University.

Nisbet, J. & Shucksmith, J. (1986*). Learning strategies*. Boston, MA: Routledge and Kegan Paul.

Nisbet, D., Tindall E. & Arroyo A. (2005). Language Learning Strategies and English Proficiency of Chinese University Students. *Foreign Language Annals,* 38 (1), ProQuest Research Library: Literature & Language, p. 100.

O'Malley, J. M. and Chamot, A. U. (1990). *Learning strategies in second language acquisition*. Cambridge: Cambridge University Press.

Ok, L. K. (2003). The relationship of school year, sex and proficiency on the use of learning strategies in learning English of Korean junior high school students. *Asian EFL Journal, 5(3),* 1-36.

Oxford, R. L. (1990a). Language learning strategies: *What every good teacher should know*. New York: Newbury House.

Oxford, R. L. (2011b). *Teaching and researching language learning strategies*. Harlow: Pearson Longman.

Oxford, R. L. (2017c). *Teaching and researching language learning strategies: Self-regulation in context (Second Edition)*. Routledge; NY.

Oxford, R. L. & Amerstorfer, C. (Eds.) (2018). *Language learning strategies and individual learner characteristics: Situating strategy use in diverse contexts*. London: Bloomsbury.

Oxford, R. L. & Burry-Stock, J. (1995). Assessing the use of language learning strategies worldwide with the ESL/EFL version of the Strategy Inventory for Language Learning (SILL). *System, 23(1),* 1-23.

Oxford, R. L. and Ehrman, M. E. (1995). Adults' language learning strategies in an intensive foreign language program in the United States. *System, 23,* 359–386.

Oxford, R. L. & Nyikos, M. (1989). Variables affecting choice of language learning strategies by university students. *The Modern Language Journal, 73(3),* 291- 300.

Özmen, D. T. & Gülleroğlu, H. D. (2013). Determining Language Learning Strategies Used by The Students at Faculty of Educational Sciences Based on Some Variables. *Eğitim ve Bilim, 38(*169*),* 30- 40.

Pawlak, M. & Oxford R. L. (2018). Conclusion: The future of research into language learning strategies. *Studies in Second Language Learning and Teaching 8*(2), 1-11.

Pawlak, M. (2011). Research into language learning strategies: Taking stock and looking ahead. In, Adam Wojtaszek and Janusz Arabski (Eds), *Individual differences in SLA* (pp. 17-37). Bristol: Multilingual Matters.

Peacock, M. (2001). Language learning strategies and EAP proficiency: Teacher views, student views, and tests results. In John Flowerdew and Matthew Peacock (Eds.), *Research perspective on English for academic purpose* (268-285). Cambridge, UK: Cambridge University Press.

Peacock, M. & Ho, B. (2003). Student language learning strategies across eight disciplines. *International Journal of Applied Linguistics, 13(2),* 179-200.

Politzer, R. and McGroarty, M. (1985). An exploratory study of learning behaviors and their relationship to gains in linguistic and communicative competence. *TESOL Quarterly, 19(*1*),* 103-123

Psaltou-Joycey, A. (2008). Cross-cultural differences in the use of learning strategies by students of Greek as a second language. *Journal of Multilingual and Multicultural Development, 29(3),* 310–324. http://dx.doi.org/10.2167/jmmd566.0

Punithavalli, K.M. (2003). *Strategi pembelajaran bahasa oleh pelajar-pelajar menengahrendah dalam mempelajari bahasa Inggeris sebagai bahasa kedua.* Unpublished MA thesis. University Kebangsaan Malaysia.

Rahimi, M., Riazi, A. & Saif, S. (2008). An investigation into the factors affecting the use of language learning strategies by Persian EFL learners. *Canadian Journal of Applied Linguistics. 11.* 31-60.

Ramirez, A. G. (1986). Language learning strategies used by adolescents studying French in New York schools. *Foreign Language Annals, 19 (*2), 131-138.

Rao, Z. & Liu, F. (2011). Effect of academic major on students' use of language learning strategies: A diary study in a Chinese context. *Language Learning Journal. 39,* 43-55. DOI: 10.1080/09571731003653565.

Reid, J. M. (1987). The learning style preferences of ESL students. *TESOL Quarterly, 21(1),* DOI: 10.2307/3586356.

Riding, R. (2000). Cognitive style: A review. In Richard Riding, and Stephen Rayner (Eds.), *Interpersonal perspectives on individual differences,* Cognitive Styles, 315-344). Stamford, CT: Ablex.

Riding, R. & Rayner, S. (1998). *Cognitive styles and learning strategies understanding style differences in learning and behaviour*. London: David Fulton Publishers.

Rigney, J. (1978). *Learning Strategies: A Theoretical Perspective*. Academic Press, New York.

Rong, M. 1999) Language learning strategies of a sample of tertiary-level students in the P. R. China. *Guidelines, 21*(1), 1-11.

Rubin, J. (1987). Learner strategies: Theoretical assumption, research history and typology. In A. Wenden, and Joan Rubin (Eds.), *Learner strategies in language learning*, 15-29. UK: University press, Cambridge.

Scarcella, R. C. & Oxford, R. L. (1992). *The tapestry of language learning: The individual in the communicative classroom* (p. 63). Boston, MA: Heinle & Heinle.

Tahriri, A. & Divsar, H. (2011). Male and Female EFL Learners' Self-Perceived Strategy Use across Various Educational Levels: A Case Study. *English Language Teaching, 4(4),* 181-194. Doi: 10.5539/elt.v4n4p181

Torres, G. (2013). Empowering the language learner: language learning strategy training and self-regulation in an EFL classroom. *Journal of International Education Research, 9* (3), 267-276.

Tseng, W., Dörnyei, Z. and Schmitt, N. (2006). A new approach to assessing strategic learning: The case of self-regulation in vocabulary acquisition. *Applied Linguistics 27(1)* 78–102. Doi: 10.1093/applin/ami046

Vandergrift, L. (1997). The comprehension strategies of second language (French) listeners: A descriptive study. *Foreign Language Annals, 30*(3), 387-409.

Vidal, R. T. (2002). Is there a correlation between reported language learning strategy use, actual strategy use and achievement? *Linguagem & Ensino, 5,* 43-73.

Wenden, A. (1987). Conceptual background and utility. In A. Wenden and Joan Rubin (Eds.), *Learner strategies in language learning* (pp. 3-13). Hemel Hempstead: Prentice Hall International.

Wharton, G. (2000). Language learning strategy use of bilingual foreign language learners in Singapore. *Language Learning, 50,* 203-243. doi:10.1111/0023-8333.00117

Willing, K. (1989). *Teaching how to learn: Learning strategies in ESL*. Sydney: National Centre for English Language teaching and Research

Yunus, M., Sulaiman, N. & Amin, M. (2013). Malaysian Gifted Students' Use of English Language Learning Strategies. *English Language Teaching*. *6,* 97-109. 10.5539/elt.v6n4p97.