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Investigation on the Relationship among Language Learning Strategies, Critical Thinking and Self-Regulation Skills in Learning English

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Abstract: This study aimed to examine the relationship among language learning strategies, critical thinking skills and self-regulation skills of preparation class students. In this process, students were interviewed and courses were observed so as to profile students' management of learning situations and their awareness for these strategies through a semi-structured form composed of open ended questions developed by the researcher based on expert opinion. The research used mixed methodologies. For the quantitative study, the findings show statistically significant results when sub-dimensions of LLS were compared to the ones in self–regulation and critical thinking skills using the students' gender, department, and education type (daytime-evening education) as variables. For the qualitative study, by use of extreme case sampling, on the basis of the average points of the mid-term exam marks students got throughout the academic year, 10 students who had the highest grades and 10 students who had the lowest grades were interviewed. Using the same sampling method in the school, students of two classrooms - one which had the highest grade average and the other which had the lowest grade average were observed. It was observed that behaviors such as encouraging oneself, asking questions, practising, mental linking, problem solving, are more prevalent characteristics of learners in the classroom with the highest grade-point average than the students in the classroom with the lowest grade-point average.

Anahtar sözcükler
Dil öğrenme stratejileri, bilişsel farkındalık, öz-düzenleme eleştirel düşünme, yabancı diller yüksekokulu hazırlık sınıfları.

İngilizce Öğrenme Sürecinde Dil Öğrenme Stratejileri, Eleştirel Düşünme ve Öz-Düzenleme Becerileri Arasındaki İlişkinin İncelenmesi

Öz: Bu çalışmada hazırlık sınıflarına devam eden öğrencilerin dil öğrenme stratejileri, eleştirel düşünme ve öz-düzenleme becerileri arasındaki ilişki belirlenmiştir. Bu süreç içinde öğrencilerin öğrenme süreçlerini nasıl yönettiğine ve farkındalıklarını belirlemeye yönelik, araştırmacı tarafından uzman görüşü alınarak geliştirilmiş, açık uçlu sorulardan oluşan yarı yapılandırılmış bir form kullanılarak öğrencilerle görüşme yapılmış ve dersler gözlem yoluyla incelenmiştir. Araştırmada karma yöntem kullanılmıştır. Nitel verilerin çözümlenmesinde içerik analizi yöntemi kullanılmıştır, ve veriler kodlanarak temalaştırılmış ve yorumlanmıştır. Nicel araştırma sonucuna göre, YDYO'da analizler sonucu öğrencilerin cinsiyet, bölüm ve öğretim türü (birinci-ikinci öğretim) değişkenlerine göre dil öğrenme stratejileri alt boyutlarının, öz-düzenleme ve eleştirel düşünme beceriyle ilişkisi karşılaştırıldığında istatistiksel olarak anlamlı sonuçlara ulaşılmıştır. Nitel araştırma için amaçlı ya da olasılık dışı örnekleme yöntemlerinden aşırı (aykırı) durum örneklemesi yoluyla, yıl boyunca final sınavına kadar alınan puanlar bazında, okul genelinde not ortalaması en yüksek 10 öğrenci ile ve not ortalaması en düşük 10 öğrenci ile görüşme yapılmıştır. Aynı örnekleme yöntemi yoluyla okulda en yüksek ve en düşük not ortalamalarına sahip olan sınıflarda gözlem yoluyla inceleme yapılmıştır. Kendini cesaretlendirme, soru sorma, pratik yapma, zihinsel bağ kurma, problem çözme gibi davranışlar sınıfta en yüksek not ortalamasına sahip öğrencilerde en düşük not ortalamasına sahip öğrencilere göre daha fazla gözlemlenmiştir.

1. Introduction[1]

According to Crystal (2003), a language can be a nation's official language when it is used as a means of communication in domains such as the government, court, media and education. Such a language is defined mostly as a "second language," for it is considered supplementary to the mother tongue. Crystal (2003) notes that even if a foreign language is not officially taught in a country, teaching foreign languages to children in school is considered important. He points out the difference between a 'second language' and a 'foreign language' and emphasizes that these terms should be used cautiously. In Turkey, when its use is considered, English is taught as a foreign language.

Reasons that motivate a person to learn a foreign language differ in terms of respective advantages of that language. According to research by Gallagher-Brett (2004), language learning reasons are categorized under the headings of citizenship, communication, economic-social-political dimensions, democracy, ecological balance, equal opportunity, globalization, identity, cultural competition, foreign policy, key skills, language awareness, mobility/travel, multilingualism, personal-social development and values. All of these factors differ in accordance with personal needs, and it is clear that everybody who wants to learn English should strive to do so. Hutchinson (1994) states that grammar and word knowledge (vocabulary) is not enough to master a language; learners and users must also improve their language learning skills in reading, writing, speaking and listening.

This endeavor requires a conscious effort to become successful language learners. As with other types of learning, language learning also includes cognitive processes. Thinking and reasoning can be regarded as the core skills in making sense of the new information and forming patterns like critical and strategic thinking which help students learn effectively. Coşkun (2011) describes critical thinking as an intellectual process, which enables us to make interpretations, as we try to answer various questions starting with ''why,'' ''what for'' and ''how." Saracaloğlu and Yılmaz (2011) emphasize that questioning and seeking reason are among the characteristics of an individual who thinks critically. Critical thinking is defined by Martinez (2006) as qualitative assessment of ideas by questioning whether or not such questions are meaningful. Strategic learners are aware that there is another way to do something, they have high self-esteem and more responsibility, they improve the accuracy of their actions, and in addition, according to Beckman (2002), they are more engaged in learning and demonstrating an improved performance. Using appropriate learning strategies gives students the opportunity to take responsibility for their own learning by increasing their independency and self-management skills (Oxford & Nyikos, 1989). Chamot and O'Malley (1994) point out that learning strategies are of great importance because they represent dynamic processes underlying learning and they facilitate more efficient learning of an academic language.

Wenden and Rubin (1987) define learning strategies as learners practicing a series of processes, steps, plans and routines to receive, store, retrieve and use knowledge. Learning strategies help students to synthesize new knowledge using their existing cognitive schemas in a way to gain a more enriched and complex schema. Language strategies can be taught easily despite the different characteristics like a learner's ability, attitude, motivation, personality and cognitive style (Oxford & Nyikos, 1989). Classifying language strategies as as direct and indirect, Oxford (1990) points out that within direct strategies, *cognitive strategies* are used by learners to construe their learning while *memory strategies* help

[1] Reproduced from first author's master's thesis written under the supervision of second author.

learners to store knowledge, and *compensatory strategies* enable learners to catch up on their incomplete learning. *Metacognitive strategies,* as a part of indirect strategies, encompass the language learning management processes and help learners organize their learning. Furthermore, *social strategies* improve interaction in the target language while *affective strategies* fulfill a learner's emotional needs such as their confidence (as cited in Fandino, 2007).

Language learning strategies include metacognitive strategies which provide learners with the opportunity of having an in-depth insight in learning. Flavell (1979) defines metacognitive awareness as knowledge that comes into being as a result of an individual's awareness of the factors and variables that influence one's cognitive activities, processes and outcomes. Metacognition is to gain awareness for one's own thinking and learning. A term first used by Flavell, metacognition is the knowledge about one's own cognitive processes and the use of this knowledge to control cognitive processes (Flavell, 1985). Brown states that metacognition encompasses capabilities such as estimating, planning, monitoring and judging one's own mental activities (as cited in Özsoy, 2008, p. 716). Stating that critical assessment of a message source ensures reasonable decisions, Flavell (1979) asserts that critical thinking should also be included in the definition of metacognition. Camillo (2011) acknowledges that metacognitive learners have awareness and they organize and evaluate their learning through self-management. Researchers report that using metacognitive strategies like planning, discerning, monitoring and judgment are essential factors which help to boost the efficiency and stability of learning. Martinez (2006) underlines that metacognitive awareness promotes perseverance and focus. Doğanay and Demir (2009) assume that learning largely requires self-management skills adding that metacognitive awareness serves a function in evaluating one's own knowledge, deciding upon what to learn, looking for ways to do so and in regulating learning processes through the interaction with the external environment. For this reason, self-management skills are within the scope of the metacognitive awareness. Self-regulation occurs when an individual uses cognitive strategies consciously in order to enhance thinking and learning (Gündoğdu, 2010). Zimmerman (2001) asserts that self-regulative learning ensues from the systematized thoughts and behaviors of learners who endeavor to reach their learning targets. As for Schraw, Crippen, and Hartley (2006), self-regulated learning consists of three basic components, namely, cognition, metacognition and motivation. Flavell (1979) points out that metacognitive information and metacognitive experiences are efficient in aiding metacognitive comprehension and monitoring, and that self-regulation and planning processes are active in metacognitive control. The purpose of centralizing learning is to focus on the learner in a way to enable one's attention to certain language activities and skills. For example, organizing, planning, and directing one's own learning processes help learners get the maximum benefits from their efforts while evaluating one's own learning allows learners to control their failures and to follow the progress in an effort to cope with the problems encountered (Sternberg, 1986).

As can be inferred from the aforementioned explanations, language learning strategies, critical thinking and self-regulative skills are all interrelated. If people do not pay enough attention to their own performance and the conditions under which their performance occur, they cannot change their actions effectively. According to Bandura (1991), success in self-regulation partly depends on commitment, consistency and self-monitoring. In this respect, cognition should be activated in order to increase the efficiency of language learning. Language learning strategies, cognitive awareness, self-regulation and critical thinking skills all serve this purpose and are highly important in activating cognition. When the literature is reviewed, it is seen that the studies conducted on preparation class students who learn English as a

foreign language in foreign language schools for one year before they enroll in their main departments, mostly consist of studies with respect to students' foreign language learning anxieties, linguistic motivations, communicative skills, metacognitive reading strategies, learning styles, language learning strategies and self-regulative perceptions. Hence, in this study, it is aimed to determine the perceptions of students regarding their language learning strategies, self-regulative learning skills and critical learning skills which are used in the language learning process by students in preparation classes.

As fas as the related literature is concerned, students who are enrolled in different branches or programs of study have different reasons for studying. For example, engineering students are often cited for their success as qualified engineers and the opportunities provided to them by different sectors. The underlying reasons for engineers' success are cited as the quality of education provided to them as well as the qualifications of the students who prefer engineering as a profession (Gençoğlu & Gençoğlu, 2005). Ertepınar (2000; cited in Gençoğlu & Gençoğlu, 2005) claims that instruction in engineering should be scheduled in a way that equips students with basic knowledge and skills while providing them with an in-depth knowledge of there are of specialization. Apart from this, students should express themselves fairly well in English as well as in Turkish.

When another branch such as tourism is considered, it can be seen that the importance of tourism education is closely related to a country's economic structure. In this respect, the quality of preparing for a country's professional labor force is key for the development of tourism. Due to the fact that in many schools facilities related to practicing foreign languages are limited, graduates are not considered as qualified professional within their sectors (Ünlüönen & Boylu, 2005). The quality of service in the tourism sector is directly related with professionals' foreign language skills because by means of their foreign language stakeholders communicate with the tourists while informing them about all aspects of our country (Altürk, Yel, Arık Yüksel & Balcı 2016). Just as tourism is an important employment area that has a labor-intensive structure, the quality of employees' foreign language skills is of utmost importance as they keep face-to-face communication with tourists as members of a qualified labor force (Ulama, Batman & Ulama, 2015).

Due to the need for qualified personnel, vocational schools have an increasing importance as enterprises meet their mid-level employment needs by hiring those who graduated from higher vocational schools. Hence, universities should not ignore the demands of enterprises when educating their students for their professional lives (Vurgun, 2009). As of today, there are almost 200 universities in Turkey and there are approximately 1000 vocational high schools within these universities who educate approximately 1.8 million students, comprising about one third of the total students receiving higher education in Turkey. Thus, the employment of graduates of vocational high schools as preferred members of relevant sectors could be easier if the quality of vocational high school education is analysed and enhanced in accordance with the national and international demands. In Turkey, many industrialists/ businessmen report that they face serious problems in terms of recruiting qualified employee (Alkan, Suiçmez, Aydınkal & Şahin, 2014). The purpose of the establishment of vocational schools is to educate competent and skilled personnel who can adapt to the changing conditions quickly by offering practical and accurate solutions to the problems encountered by thinking analytically, communicating well, working cooperatively and following sector-specific innovations (Ulus,Tuncer & Sözen, 2015).

When the related literature is reviewed, it can be seen that vocational schools' tourism education programs face with serious challenges while teaching foreign languages which reduces the quality of teaching seriously (Akıncı, 2015). Davras and Bulgan (2012) found that foreign language preparatory class students in vocational high schools' tourism and hotel management programs are aware that learning English at school is key to their future success. However, because many university students are not aware of how English can be learned, students should firstly be taught about how to learn a foreign language (Gökdemir, 2005). In this context, language learning strategies, critical thinking and self-regulation skills can encourage students to learn English in a more conscious manner.

1.1. Aim of the Research

Possessing metacognitive awareness and high-degree self-regulation skills leads to a more systematic set of thoughts and behaviors while those thoughts and behaviors can be assessed with the help of one's critical thinking skills. There is no study, to our knowledge, on vocational high school students' use of language learning strategies and their critical thinking and self-regulation skills. In this study, it is aimed to examine the relationship among language learning strategies, critical thinking skills and self-regulation skills of preparation class students who are learning English as a foreign language. It is expected that the findings will be useful in terms of forming a basis for further studies in increasing the efficiency of learners in planning, monitoring and evaluating their own foreign language learning processes.

Four research questions were addressed in the quantitative phase of the study:

1) Do language learning strategies differ significantly with respect to gender, field, teaching program and type of teaching?
2) Does self-regulative learning differ significantly with respect to gender, field, teaching program and type of teaching?
3) Does critical thinking differ significantly with respect to gender, field, teaching program and type of teaching?
4) What is the nature of the relationship among language learning strategies, sub-dimensions of self-regulation and critical thinking?

Two research questions were addressed in the qualitative phase of the study:

1) What are the similarities or differences in the study habits of students with the highest and lowest grade point average obtained in mid-term exams?
2) What are the similarities or differences in these students' language learning strategies, self-regulation and critical thinking skills?

2. Methodology

In the study, both quantitative and qualitative research methods were used. Yıldırım and Simsek (2011) note that in quantitative studies, researchers try to develop an objective attitude by surveying the events and phenomena from an external perspective whereas in qualitative studies, researchers have a participatory role by following the events and phenomena closely. In this study, both methods were used as a mixed method study. Johnson et al. (2007) acknowledge that a mixed methods researcher composes components of qualitative and quantitative research approaches (e.g. use of qualitative and quantitative perspective, data gathering, analysis, and inference procedure) with the aim of deepening understanding (as cited in Creswell, 2010). Furthermore, this study is based on a relational screening model. In the relational screening model, it is intended to identify whether research variables change, and if so, how these changes occur (Karasar, 1999).

2.1. Participants and Characteristics

2.1.1. Sample Created for Quantitative Data

The population of the study consisted of English language preparatory students enrolled in Adnan Menderes University's School of Foreign Languages which is located in the city centre of Aydın. In the academic year of 2012-2013, students were classified according to their departments and fields. Although a total number of 637 students participated in the study, 29 students were excluded because they incompletely filled out the assessment instrument. Hence, the number of students who participated in the study was 608. Students' fields of study were:

- Food, Construction and Mechanical Engineering undergraduate programs are included within *Engineering Faculty*;
- Accommodation, Travel, Tourism Guiding and Food & Beverage Management undergraduate programs are included within *Tourism Faculty*; and
- Cookery and Tourism and Hotel Management associate degree programs are included in *Vocational High School*.

2.1.2. Sample Created for Qualitative Data

For the qualitative data, through extreme case sampling among purposive sampling methods, interviews were performed with 10 students with the highest grade point average and with another 10 students with the lowest grade point average on the basis of grades taken from all mid-term exams (4) throughout the year. The classrooms were determined on the basis of students' grade-point averages.

Table 1
Ordered List on the basis of Point Averages for 4 Mid-term Exams in Daytime and Evening Education in Central SFL (Interviewed Students)

Students with the Highest Grade Point Average (10)					
Name	**Gender**	**Average**	**Department**	**Type of Education**	**Branch**
Y1	Male	25,6	Tourism and Hotel Accommodation Management	Evening Education	206
Y2	Female	24,8	Food Engineering	Daytime Education	101
Y3	Male	24,8	Mechanical Engineering	Daytime Education	101
Y4	Male	24,8	Mechanical Engineering	Daytime Education	101
Y5	Female	24,8	Food Engineering	Daytime Education	101
Y6	Male	24,4	Mechanical Engineering	Daytime Education	101
Y7	Male	24,4	Travel Agency Management	Evening Education	211
Y8	Male	24	Tourism Guiding	Evening Education	213
Y9	Male	23,6	Food & Beverage Management	Evening Education	210
Y10	Male	23,6	Travel Management	Evening Education	210
Students with Lowest Grade-Point Average (10)					
Name	**Gender**	**Average**	**Department**	**Type of Education**	**Branch**
D1	Male	5,6	Tourism and Travel	Daytime Education	114
D2	Male	7,2	Cookery	Daytime Education	115
D3	Male	7,6	Cookery	Evening Education	205
D4	Male	7,6	Tourism and Travel	Evening Education	214
D5	Male	8	Tourism and Travel	Daytime Education	111
D6	Female	8,4	Tourism and Travel	Daytime Education	116
D7	Male	8,8	Tourism and Travel	Daytime Education	116
D8	Male	8,8	Food & Beverage Management	Evening Education	210
D9	Female	8,8	Travel Management	Evening Education	211
D10	Female	8,8	Tourism and Travel	Evening Education	202

2.2. Data Gathering

Literature was reviewed so as to collect data to determine the relation among cognitive awareness, language learning strategies, critical thinking and self-regulation skills. Three different assessment instruments which are "Strategy Inventory for Language Learning", "Scale of Critical Thinking", and "Scale of Self-Regulated Learning Skills" were applied to the students. The relationships among language learning strategies, critical thinking and self-regulative learning levels are analyzed. Variables, measuring demographic characteristics by means of a classification scale and information about the students of the English preparatory class such as gender, department and type of education (daytime-evening) is included. In the second part, a 5-point Likert scale, consisting of 41 items, was provided to measure the self-regulating learning level. In the third part, Strategy Inventory for Language Learning consisting of 50 items is included as well as the Scale of Critical Thinking consisting of 55 items which was prepared as a 6-point Likert scale.

With these three different assessment instruments, for which validity and reliability studies were performed beforehand, in order to test the assessment instruments before being used in the study, a preliminary application was performed in Söke Management Faculty Campus and Nazilli Sümer Campus. The main application of the scales was performed on students in English prep class of FLHS, located in city centre of Aydın province after validity and reliability analysis were completed again. The *Scale of Self-Regulated Learning Skills* developed by Turan (2009), the *Strategy Inventory for Language Learning* developed by Oxford (1990), for which validity, reliability and language equivalency studies of Turkish version were made by Cesur and Fer (2007), and the *Scale of Critical Thinking* developed by Semerci (2000) were used as the main data collection instruments.

In addition to the application of the scale, students were interviewed by using a semi-structured form composed of open–ended questions. The questions were developed by the researchers after receiving expert opinion to determine how students manage their learning processes. All of the lessons taught in the classes with the highest and lowest grade-point averages specified were observed for one week by means of unattended intensive observation. The lecturers explained the importance of filling in the scales correctly before proceeding to the applications. For the qualitative phase of the study, opinions of participant students were obtained through semi-structured questions in a classroom specified in the School of Foreign Languages.

2.3. Data Analysis

The data set was analyzed through SPSS 18.0 package program. Following the reliability analysis performed on the self-regulative learning scale consisting of 41 items, the alpha value was calculated as 89.4%. It is possible to say that the scale has a high level of reliability. The total item correlations had values varying between 0,010 and 0,752. Following the reliability analysis in LLS inventory which consists of 50 items, the alpha value was calculated to be 92.9%. Considering the given value, it could be said that the scale has a high level of reliability. Following the reliability analysis performed on the critical thinking scale consisting of 55 items, the alpha value was calculated as 93.7%. All tests were performed at 0.05 significance level as commonly used in social sciences. The reliability analysis of the instruments was carried out again after the actual application and the reliability of the self-regulative learning scale, language learning strategies inventory and critical thinking scale were determined as 91.9%, 92.9% and 95.5% respectively. Hence, it was found that all three assessment scales had a high level of reliability.

In order to determine whether the tests used in the analyses would be parametric or non-parametric, the normality of distribution of opinions was tested with Kolmogorov-Smirnov tests. According to the test results, it was seen that scale groups did not present a normal distribution (.000). That is, they do not meet the criteria (p>0,05). Therefore, analyses were performed by using non-parametric techniques.

As for the interviews and observational data obtained in the qualitative phase of the study, researchers' notes were thematically interpreted by means of content analysis. The data analysis process was completed upon ensuring a consensus after the review of observation and interview notes by the researcher and a specialist researcher, who worked as a lecturer in SFL English preparation classes. Each of the facts within the scope of data obtained as a result of observation was appropriately matched with language learning strategies and self-regulating and critical thinking skills. Language learning strategies, self-regulating and critical thinking skills were reclassified and visualized based on their frequency so that comparative interpretations could be carried out between the most successful and least successful students.

3. Findings

In this section, results obtained through quantitative and qualitative data collection tools are included.

3.1. Quantitative Findings

Sub-dimensions of language learning strategies, which differed significantly by gender were determined as memory, cognitive, recovery and social strategies based on analysis results of the Mann-Whitney U test. Among the sub-dimensions of language learning strategies, memory strategies differed significantly in favor of females whereas cognitive, recovery and social strategies differed significantly in favor of males. Therefore, females use memory strategies more than males do and males use cognitive, recovery and social strategies more than females do.

Table 2
Analysis of the language learning strategies inventory on the basis of gender

Dimensions	Gender	N	Item Avr.	Z	P
Memory Strategies	Female	284	321.16	-2.192	0.028
	Male	324	289.90		
Cognitive Strategies	Female	284	284.74	-2.598	0.009
	Male	324	321.82		
Recovery Strategies	Female	284	280.27	-3.191	0.001
	Male	324	325.73		
Metacognition Strategies	Female	284	302.45	-.269	0.788
	Male	324	306.29		
Affective Strategies	Female	284	295.07	-1.242	0.214
	Male	324	312.76		
Social Strategies	Female	284	289.14	-2.024	0.043
	Male	324	317.96		

When sub-dimensional points of language learning strategies were analyzed on the basis of analysis results of the Mann-Whitney U test, it was determined that only the sub-dimension of metacognitive strategies differed significantly in the education program. Metacognitive

strategies differ significantly in favor of students in undergraduate programs. Undergraduate students use metacognitive strategies more than the ones in associate degree programs.

Table 3
Analysis of strategy inventory for language learning on the basis of the education program

Dimensions	Education Program	N	Item Ort	Z	P
Memory Strategies	Undergraduate	484	309.25	-1.762	.078
	Associate Degree	121	277.99		
Cognitive Strategies	Undergraduate	484	304.32	-.370	.711
	Associate Degree	121	297.74		
Recovery Strategies	Undergraduate	484	305.35	-663	.508
	Associate Degree	121	293.60		
Metacognitive Strategies	Undergraduate	484	311.66	-2.440	.015
	Associate Degree	121	268.36		
Affective Strategies	Undergraduate	484	303.33	-.093	.926
	Associate Degree	121	301.68		
Social Strategies	Associate Degree	121	308.45	-1.537	.124
	Undergraduate	484	281.21		

According to the analysis results of the Kruskal-Wallis H test, it was found that the scores of language learning strategies differed significantly by field in the sub-dimensions of memory, metacognitive and social strategies. Memory, metacognitive and social strategies differed significantly in favor of the students enrolled in the Faculty of Tourism.

Table 4
Analysis of the strategy inventory for language learning on the basis of the field

Dimensions	Field	N	Item Avr.	Chi-square	P
Memory Strategies	Engineering	103	285.29	7.605	0.022
	Tourism	374	**317.51**		
	MYO*	127	272.25		
Cognitive Strategies	Engineering	103	300.89	.173	0.917
	Tourism	374	304.66		
	MYO*	127	297.45		
Recovery Strategies	Engineering	103	317.20	1.777	0.411
	Tourism	**374**	303.76		
	MYO*	127	286.87		
Metacognitive Strategies	Engineering	103	283.84	10. 479	0.005
	Tourism	374	319.99		
	MYO*	127	266.11		
Affective Strategies	Engineering	103	281.59	2.172	0.337
	Tourism	374	309.60		
	MYO*	127	298.56		
Social Strategies	Engineering	103	277.13	6.441	0.040
	Tourism	**374**	**316.55**		
	MYO*	127	281.69		

MYO*: Vocational School of Higher Education. This means that students in the Tourism Faculty use memory, metacognitive and social strategies more than the ones in the MYO and Engineering Faculty.

Based on the analysis results of Mann-Whitney U Test, no significant difference was found in any sub-dimension of the Language Learning Strategies' Inventory according to the type of education (daytime and evening education).

Table 5
Analysis of strategy inventory for language learning on the basis of type of education

	Memory St.	Cognitive St.	Recovery St.	Metacognitive St.	Affective St.	Social St.
Mann-Whitney U	45046.500	42623.500	44703.000	44044.000	44678.500	43450.000
Wilcoxon W	104731.500	102308.500	104388.000	103729.000	104363.500	103135.000
Z	-.150	-1.279	-.310	-.617	-.322	-.896
Asymp. Sig. (2-tailed)	.881	.201	.756	.537	.748	.370

Sub-dimensions of the Self-Regulative Learning Scale, which differed significantly based on the analysis results of the Mann-Whitney U test, were determined to be planning and setting objectives as well as the use of strategy and evaluation. Both sub-dimensions differed significantly in favor of females. Hence, females are more inclined to make a plan, set an objective, use relevant strategies, evaluate their work, and motivate themselves while learning.

Table 6
Analysis of the self-regulative learning scale on the basis of gender

Dimensions	Gender	N	Item Avr.	Z	p
Planning and setting objectives	**Females**	284	**337.80**	-4.385	0.000
	Males	324	275.31		
Use of strategy and evaluation	**Females**	284	**331.69**	-3.575	0.000
	Males	324	280.67		
Motivation and prompt for learning	**Females**	284	310.88	-.842	0.400
	Males	324	298.91		
Dependency in learning	**Females**	284	317.93	-1.768	0.077
	Males	324	292.73		

Based on the analysis results of the Mann-Whitney U test, it was found that results differed significantly according to students' programs. Both sub-dimensions differed significantly in favor of the undergraduate program. This means that undergraduate program students are more inclined to motivate themselves and use strategies than associate degree program students.

Table 7
Analysis of the self-regulative learning scale on the basis of the education program

Dimensions	Education Program	N	Item Avr.	Z	P
Motivation and prompt for learning	**Undergraduate**	484	**312.28**	-2.622	0.009
	Associate Degree	121	265.87		
Use of strategy and evaluation	**Undergraduate**	484	**310.08**	-1.994	0. 046
	Associate Degree	121	274.68		
Planning and setting objectives	**Undergraduate**	484	306.59	-1.013	0. 311
	Associate Degree	121	288.63		
Dependency in learning	**Undergraduate**	484	309.63	-1.869	0.062
	Associate Degree	121	276.48		

Based on analysis results of Kruskal-Wallis H test, it was found that the results differed significantly by field. Both sub-dimensions differed significantly in favor of Tourism. Students receiving an education in the Tourism Faculty are more inclined to motivate themselves and use strategies and evaluate their learning than students in the MYO and Engineering Faculties.

Table 8
Analysis of the self-regulative learning scale on the basis of field

Dimensions	Field	N	Item Avr.	Chi-square	P
Motivation and prompt for learning	Engineering	103	296.62	9.363	0.009
	Tourism	**374**	**317.45**		
	MYO	127	263.23		
Use of strategy and evaluation	Engineering	103	280.56	8.220	0.016
	Tourism	**374**	**318.37**		
	MYO	127	273.57		
Planning and setting objectives	Engineering	103	273.14	5.616	0.060
	Tourism	**374**	315.08		
	MYO	127	289.26		
Dependency in learning	Engineering	103	299.82	5.440	.066
	Tourism	**374**	313.60		
	MYO	127	271.98		

Based on the analysis results of Mann-Whitney U Test, no significant difference could be found in any sub-dimensions of the self-regulative learning scale according to the type of education (daytime and evening education).

Table 9
Analysis of the self-regulative learning scale on the basis of the type of education

Dimensions	Mot. and L.	Plan-Obj.	D. in L.	Use of Str. V
Mann-Whitney U	44132.500	44896.500	44703.000	43966.000
Wilcoxon W	103817.500	104581.500	103651.000	103177.000
Z	-.578	-.220	-.654	-.874
Asymp. Sig. (2-tailed)	.564	.826	.513	.382

Based on the analysis results of Mann-Whitney U Test, it was determined that the Critical Thinking differed significantly (p value 0.001) by gender in favor of females. Accordingly, females (328.94) think more critically than males (283.07). Based on the analysis results of Mann-Whitney U Test, it was determined that the Critical Thinking differed significantly (p value 0.005) by education program in favor of students in undergraduate programs. Accordingly, students in undergraduate programs (312.98) think more critically than those who are included in Associate Degree programs (263.09).

Also, based on the analysis results of Kruskal-Wallis H test, it was determined that the Critical Thinking differed significantly (p value 0.000) by field, and that students in the Faculty of Tourism (325.06) perceived themselves as more critical in their thinking than those in Engineering (273.17) and Vocational High School programs (259.85). Based on the analysis results of Mann-Whitney U Test, it was determined that the critical thinking showed no significant difference (asymp. sig. 2-tailed .238) on the basis of the type of education (i.e., daytime and evening education). In foreign languages, the type of high school education has no effect on students' critical thinking.

Table 10
Correlation Coefficient (CC) for Sub-dimensions of Inventory of Language Learning Strategies, Sub-dimensions of Self-Regulative Learning Scale and Critical Thinking Scale

Spearman rho		***1. CTS Total Score***	***2.Motivation and prompt for learning***	***3.Planning and setting objectives***	***4.Dependency in learning***	***5.Use of Strategy and evaluation***	***6.Memory Strategies***	***7.Cognitive Strategies***	***8.Recovery Strategies***	***9.Metacognitive Strategies***	***10.Affective Strategies***	***11.Social Strategies***
CTS Total Score	CC	1	,555**	,509**	,322**	,598**	,378**	,248**	,204**	,502**	,289**	,357**
	Sig.	.	0	0	0	0	0	0	0	0	0	0
	N	608	608	608	608	608	608	608	608	608	608	608
Motivation and prompt for learning	CC	,555**	1	,558**	,166**	,605**	,368**	,297**	,213**	,421**	,228**	,250**
	Sig.	0	.	0	0	0	0	0	0	0	0	0
	N	608	608	608	608	608	608	608	608	608	608	608
Planning and setting objectives	CC	,509**	,558**	1	,168**	,684**	,356**	,474**	,089*	,421**	,220**	,216**
	Sig.	0	0	.	0	0	0	0	0,028	0	0	0
	N	608	608	608	608	608	608	608	608	608	608	608
Dependency in learning	CC	,322**	,166**	,168**	1	,145**	0,032	-,093*	0,019	,163**	-0,046	-0,008
	Sig.	0	0	0	.	0	0,434	0,022	0,645	0	0,258	0,851
	N	608	608	608	608	608	608	608	608	608	608	608
Use of strategy and evaluation	CC	,598**	,605**	,684**	,145**	1	,433**	,382**	,157**	,499**	,287**	,329**
	Sig.	0	0	0	0	.	0	0	0	0	0	0
	N	608	608	608	608	608	608	608	608	608	608	608

Memory Strategies	CC	,378**	,368**	,356**	0,032	,433**	1	,229**	,374**	,547**	,368**	,419**
	Sig.	0	0	0	0,434	0	.	0	0	0	0	0
	N	608	608	608	608	608	608	608	608	608	608	608
Cognitive Strategies	CC	,248**	,297**	,474**	-,093*	,382**	,229**	1	,106**	,279**	,141**	,194**
	Sig.	0	0	0	0,022	0	0	.	0,009	0	0	0
	N	608	608	608	608	608	608	608	608	608	608	608
Recovery Strategies	CC	,204**	,213**	,089*	0,019	,157**	,374**	,106**	1	,350**	,347**	,326**
	Sig.	0	0	0,028	0,645	0	0	0,009	.	0	0	0
	N	608	608	608	608	608	608	608	608	608	608	608
Metacognitive Strategies	CC	,502**	,421**	,421**	,163**	,499**	,547**	,279**	,350**	1	,480**	,626**
	Sig.	0	0	0	0	0	0	0	0	.	0	0
	N	608	608	608	608	608	608	608	608	608	608	608
Affective Strategies	CC	,289**	,228**	,220**	-0,046	,287**	,368**	,141**	,347**	,480**	1	,532**
	Sig.	0	0	0	0,258	0	0	0	0	0	.	0
	N	608	608	608	608	608	608	608	608	608	608	608
Social Strategies	CC	,357**	,250**	,216**	-0,008	,329**	,419**	,194**	,326**	,626**	,532**	1
	Sig. (2-tailed)	0	0	0	0,851	0	0	0	0	0	0	.
	N	608	608	608	608	608	608	608	608	608	608	608

* Pearson Correlation is significant at p<.05 level.
** Pearson Correlation is significant at p<.01 level.

The results of the correlation analysis provide insight into the relationships among the variables of the study (Table 10). It can be seen that there is no significant relation between dependency in learning, which is a sub-dimension of the Self-Regulative Learning Scale, and Memory, Recovery, Affective and Social Strategies, which are the sub-dimensions of Language Learning Strategies.

Medium-level and *positively* significant relations determined between the scales and sub-dimensions on the basis of correlation analysis are as follows:

- There is a significant relation between Planning and Setting Objectives and Use of Strategy and Evaluation ($p < 0.01$ $r = .684$).
- There is a significant relation between Metacognitive Strategies and Social Strategies ($p < 0.01$ $r = .626$).
- There is a significant relation between Motivation and Prompt for Learning and Use of Strategy and Evaluation ($p < 0.01$ $r = .605$).
- There is a significant relation between Critical Thinking and Use of Strategy and Evaluation ($p < 0.01$ $r = .598$).

- There is a significant relation between Motivation and Prompt for Learning and Planning and Setting Objectives ($p < 0.01$ $r = .558$).
- There is a significant relation between Critical Thinking and Motivation and Prompt for Learning ($p < 0.01$ $r = .555$).
- There is a significant relation between Memory Strategies and Metacognition ($p < 0.01$ $r = .547$).
- There is a significant relation between Affective Strategies and Social Strategies ($p < 0.01$ $r = .532$).
- There is a significant relation between Critical Thinking and Planning and Setting Objectives ($p < 0.01$ $r = .509$).
- There is a significant relation between Critical Thinking and Metacognitive Strategies ($p < 0.01$ $r = .502$).

It can be inferred that the more students improve their critical thinking skills, strategy using, evaluative learning, and self-motivating, the more they are inclined to improve their planning and objective setting. Moreover, students who think critically tend to use metacognitive strategies more frequently. In addition, the increase in using metacognitive strategies renders an increase in using memory strategies and social strategies. Apart from these, students using social strategies frequently are likely to use affective strategies more often than others do.

3.2. Qualitative Findings

3.2.1. Findings on Similar and Different Characteristics of Students with the Highest and Lowest Grade Point Average

The results obtained through the questions directed at students and the analysis of the interview data are as follows.

3.2.2. Reasons for Learning English

When the answers regarding the purposes of learning English are considered, all preparation class students with the highest and lowest grade point averages defined English as a world language that must be learned which indicates that there is no apparent distinction between the two groups in this regard. In the second item, all students want to learn English in order to be successful in their professions. The following are the major findings based on the responses of these two groups:

- the students with the highest grade-point averages like English more than the students with the lowest grade-point averages,
- the students with the highest grade-point averages are more likely to believe that they should learn English thoroughly than the students with lowest grade-point averages.
- students in both groups state that learning English offers various opportunities and privileges unto them.

3.2.3. Effort to Learn English Effectively

Whereas almost all of the students with the lowest grade-point averages stated that they don't make a sufficient effort to be able to learn English in an efficient manner, more than half of the students with the highest grade-point averages stated that they do not make a sufficient effort either. The number of students who believe that they can learn English efficiently with sufficient effort is higher for the students with the highest grade-point averages in comparison to the students in the group with the lowest grade-point averages. In both groups, students mostly regard themselves as effortless. As one student states:

L6 *I don't believe I struggle hard, I forget what I know about the subjects I studied a lot because of anxiety. Maybe, if I study regularly and make more revision, I can learn effectively.*

3.2.4. Diligence in Learning English

When the students' answers regarding the question "What they do individually to learn English" are analyzed, students in both groups stated in the first item that they engaged in activities such as watching foreign movies, listening to music, and playing computer games. The number of students who replied as such among the students with the highest grade-point average is higher than that of the students in the other group.

Although it does not make a serious difference, two of the students with the lowest grade-point averages stated that they do not make an effort at all while another two students in the same group remarked that they tried to learn English through translating texts from their native language. Another two said that they tried to read books and publications, and one of them stated that he tried to learn words. When the students with the highest grade-point averages are considered, they stated that they tried to speak with their friends in English. Moreover, they claimed that they read books and publications while trying to learn words.

3.2.5. Organizing their Learning

When it is analyzed whether or not the students who participated in the interview planned and organized their learning of English, almost all of the students in both groups stated that they did not organize their learning. While all of the students in the group with the highest grade-point averages stated that they do not work in a planned manner, two students in the other group stated that they postponed planned study until the summer.

3.2.6. Techniques Preferred

When students' answers regarding the methods they use while learning English are analyzed, students in both groups stated in the highest rate that they prefer listening. Listening is preferred by half of the students with the lowest grade-point averages, and by all of the students with the highest grade-point averages. In general, students try to improve their listening skills by listening to foreign songs and watching movies.

Another technique used by the students is speaking and there is a considerable difference between the two groups. The number of students in the group with the highest grade-point averages who stated that they preferred speaking to learn is three times more than the number of students in the other group. The number of students in both groups did not go beyond the half in terms of reading and writing preferences, and there is no significant difference between the two groups.

Y6 *I think that the important skills in language learning are listening and speaking. I think that mere knowledge is not enough*.

3.2.7. Measures Taken Against Difficulties in Learning English

When students are asked how they cope with the challenges, the students in both groups stated in the highest rate that they consulted a lecturer or sought advice from someone who knows the language. No great difference was observed between the two groups in terms of consultation. Other measures taken when facing difficulties were reviewing materials, getting help from the Internet and trying to focus on learning words, which are preferred by less than half of the students in both of the groups. Hence, there is no significant difference between the two groups in terms of these measures.

3.2.8. Transferring English to Daily Life

Almost all of the participant students considered themselves to be able to transfer what they have learned in English to their everyday lives. There is no significant difference among the students in both groups since more than half of the students in both groups stated that they transfer what they have learnt to their daily lives by watching TV, listening to songs, and reading English magazines and books. Though in a limited number, students in both groups stated that they transfer what they have learnt to daily life by playing English-supported games on the internet, using the telephone and computer in English mode, chatting in English on the net and trying to speak with friends or foreign people. One of the students in the group with the highest grade-point average stated that it is difficult to transfer what has been learnt to daily life since there aren't many English speaking people to practice with. For this student, that is the major reason why he wants to move abroad to study English for a while.

3.2.9. Memory Power

When the opinions of the participants regarding the relationship between memory and learning English are considered, all of the students in both groups think that they are related to each other, and that it is mostly related to vocabulary. While more than half of the students with the highest grade-point averages find their memorization skills strong, only one student in the group with the lowest grade-point averages stated that he has a strong memory. As to the nine other students within the same group, they find their memorization skills at the medium-level or weak. The number of students considering their memorization at the medium-level or weak is less than half in the group with the highest grade-point averages. Three students in the group with the lowest grade-point averages think that they memorize the things in which they have an interest better.

3.2.10. Vocabulary Learning

Almost all of the students in the participant groups stated that they tried to earn words effectively lby using them in daily life. Half of the students with the highest grade-point averages and only one of the students with the lowest grade-point averages stated that they learn words by making sense of them. Two students in the group with the lowest grade-point average remarked that they tried to learn the words by heart. As one student responds:

H10 *I prefer making sense of the words. I will give an example about the method "memory palace"; for instance, our given word is "brainstorming," create a palace, whether this is your house or any other place you know… Have you created it? Good, now enter that palace and open the freezer of the refrigerator and put a real human brain in it and close the freezer. When you open again you will see a frozen human brain. Here I associate brain storming with a frozen brain.*

3.2.11. Anxiety and Learning English

When the answers of participants are analyzed, half of the students with the highest grade-point averages stated that they feel anxious while speaking in English. The other half stated that they did not feel any anxiety/fear. Accordingly, half of the students with the lowest grade-point averages stated that they feel anxious while speaking in English. Three other low-grade students stated that they do not feel anxiety/fear, but another student in that group stated that he is afraid that his effort would bring him nothing. Another one remarked that compulsory courses cause anxiety in his studies as he claims:

L8 *There's a huge difference between learning itself and applying what we've learned in a conversation because of anxiety. The things I have learnt will vanish, and I'll forget what I know.*

3.2.12. Self-Questioning in Learning English

At an equal rate, a great many students in both groups stated that they question themselves while learning English, and in general, they think about what they can do to perform better. Yet, the remaining students in the two groups stated that they do not try to evaluate themselves.

Y9 *I question myself, and I think everyone needs self-questioning, for it enhances the awareness about what is known as well as what needs to be known.*

3.2.13. Source of Motivation

The participants are questioned to determine the sources of motivation while learning English. Were they motivated by somebody else or were they motivated as learning for their own purposes? All of the students in both groups stated that they motivated themselves in their own learning. The number of students who think that motivation provided by someone else as well as motivating themselves for their own purposes is equal in both groups (two students in each group). As the data shows, students are their own motivators:

L3 *I know very well the importance of English for my life and question myself about my knowledge. If I know English, I see myself as high climber, so it is my motivation; I make it myself.*

3.2.14. Findings on Similar and Different Behaviors of Students with the Highest and Lowest Grade Point Average

In order to assess the efficacy of the efforts of the students while learning English, observational data was analyzed based on the data coming from the LLS Inventory, Scales of Self-Regulation, and the Critical Thinking Skills. Table 11 shows the findings in a brief manner.

Table 11
Behaviors Determined for Observation

Language Learning Strategies	Self-Regulation Skills	Critical Thinking Skills
Direct Strategies	- To control whether a subject was learnt completely - To look for ways to facilitate learning - To apply obtained information to the recent problem status	- To focus attention on lessons and studies - To take part in decisions in the classes - To find contrasts among the data - To ask questions to better understand - To try to reach essential information while preparing homework - To express opinions clearly
a. Memory Strategies - To establish cognitive associations - To repeat ***b. Cognitive Strategies*** - To practice - To analyze ***c. Recovery Strategies*** - To make estimations while listening and reading		

Indirect Strategies		
a. Metacognitive Strategies - To plan - To problem solve - To monitor - To evaluate ***b. Affective Strategies*** - To decrease anxiety - To encourage oneself - To command and control emotions ***c. Social Strategies*** - To ask questions and make requests - To cooperate		

2.3.15. Behaviors Observed in Classrooms

Student behaviors corresponding to the scope of each of the language learning strategies, critical thinking skills and self-regulation skills were matched with LLS, CTS and SRS titles and subtitles, and it was analyzed how often LLS, CTS and SRS were repeated in each of the classes.

In order to determine whether there are differences or similarities between the two classrooms selected, based on the data obtained following the observation, behaviors under language learning strategies were observed in both groups. Behaviors in respect to critical thinking and self-regulation skills were observed respectively in the second and the third item in each group. No appreciable difference was observed on the basis of grade-point averages regarding critical thinking and self-regulation skills between the classroom with the highest grade-point average and the lowest grade-point average.

However, it was observed that behaviors based on encouraging one's self, asking questions, practicing skills, establishing mental associations, solving problems, and making estimations under the strategy inventory for language learning are more common with the students in the classroom with the highest grade-point average (Daytime Education), than the students in the classroom with the lowest grade-point average (Evening Education). In light of the observational data, students in the classroom with the highest grade-point average use language strategies more than the students in the other classroom.

2.3.16. Some Observational Notes:

Observational notes provided the researchers with further insight. As the instructor asks in English:

> *"What do you say about our talk? Can you imagine a machine which instantly translates your speech into English?"*

Student 1 answers in English:

> *"Everybody has different pronunciation, so the machine cannot understand everyone, and for example, we make a joke, the machine cannot translate because it does not have the same meaning."*

One thing that grabs the attention of the researcher is that students endeavor to guess the meanings of English words before they answer the questions. Students are more active in learning words in speaking activities. Also they mostly answer the questions related to listening activity accurately. The instructor always speaks in English in the classroom. Instructor asks in English:

> *"What do we say in Turkish, in a long term?"*

Student 1 answers in Turkish: Uzun vadede (in the long run)

The instructor, this time, uses a word game called "hangman" to teach students the meanings and synonyms of the words. She wants her students to find the word "sort" which is a synonym of the word "kind," and she writes the letter "S" on the board.

One student answers: "Search",

The instructor adds the head to the drawing on the board saying "it is not search".

Another student responds saying "source."

The instructor draws the torso of the hangman, and she asks a student to say four letters.

The student says the letters "K, P, A, U" and fails to guess any of the letters in the teacher's chosen word.

The instructor draws arms and legs, and just then, one student finds the right word and yells out loud "Sort!"

The instructor congratulates him.

4. Conclusion and Discussion

In the study, memory strategies, one of the sub-dimensions of language learning strategies, differed significantly in favor of the females, whereas Cognitive, Recovery and Social Strategies showed a significant difference in favor of the males. In the study conducted by Aslan (2009) with the students in the English preparatory class, Memory Strategies differed significantly in favor of the females. This result, hence, supports similar research findings. Aslan (2009) further concluded that social strategies are in favor of the females in language learning, and that Cognitive and Recovery Strategies did not differ significantly by gender.

In the study conducted by Kılıç and Padem (2014) it was found that memory strategies and recovery strategies differed respectively in favor of females. In our study, memory strategies were found in favor of the females as well. In another study involving English preparatory classroom students, it was set forth that females make use of language learning strategies much more than males do, males are more successful in the exams, and language learning strategies have an impact on success (Çakır, 2012).

In the study by Yalçın (2006), it was concluded that females used more strategies than males do. As for this study, three of the four sub-dimensions of language learning strategies were determined to differ significantly by gender in favor of males. In the study by Gülsoy (2011), it was found that the language learning strategies scale developed by the researcher differed significantly in favor of the males in the sub-dimensions of operative cognitive strategies and cognitive strategies. In the study by Cesur (2008), it was found that language learning strategies differed significantly in all sub-dimensions in favor of the females. Çelik (2007) approached the relation between gender and learning strategies differently by synthesizing research concerning this matter and concluded his study by emphasizing the inconsistency of findings on the issue of gender. He pointed out that, regardless of students' gender, strategy use should be included in instruction so as to offer both genders an equal opportunity for success. Furthermore, Çelik (2007) stated that only through strategy training can students practice different language learning strategies. Thus, they gain awareness for the strategies chosen as most advantageous for them, which in turn enhances students' self-confidence and responsibility, enabling them to become autonomous and engaged learners.

In this study, a medium-level significant relation among sub-dimensions of language learning strategies was found among memory strategies, metacognitive strategies, affective strategies and social strategies. This finding embodies the principle of taking progressivity into consideration, and that gaining such skills is a significant factor in increasing quality. The fact

that many students learn primarily by means of employing memory strategies may be a door to learning metacognitive strategies.

Based on the education program as a variable in the study, metacognitive strategies, one of the sub-dimensions of language learning strategies, differed significantly in favor of the undergraduate program. It was concluded that the motivation and prompt for learning and the strategy and evaluation usage sub-dimensions of the self-regulative learning scale showed a significant difference in favor of undergraduate programs. It was determined that the critical thinking scale differed significantly in favor of students in the undergraduate program. These findings may be explained by the fact that students in undergraduate programs have more awareness than those in the associate degree programs as regards the necessity to learn English. When the findings are considered in terms of the type of education (daytime and evening education) variable, no significant difference could be observed in any of the utilized assessment instruments and sub-dimensions therewith.

Based on the field as a variable, the strategy inventory of language learning, which includes the memory, metacognitive and social strategies, differed significantly in favor of the students in the Tourism Faculty. Sub-dimensions of the self-regulative learning scale, such as the motivation and prompt for learning, and the use of strategy and evaluation, differed significantly in favor of the students in the Tourism Faculty. Furthermore, critical thinking skills once again differed significantly in favor of the students in the Tourism Faculty, and as such, these students may be regarded as having higher preparedness and motivation than the students studying in the engineering faculty and vocational high school.

Critical thinking skills in the study differed significantly in favor of the females. In the study of Ay and Akgöl (2008), it was stated that girls are able to think more critically than males do. In their study, it was further determined that there is a medium-level of relation among critical thinking and the use of strategy and evaluation, motivation and prompt for learning, planning and setting objectives and metacognitive strategies. This finding shows that an increase in critical thinking skills may improve the quality of cognitive and affective input characteristics, which may be required for efficacy in language learning. There is a moderately significant relationship among motivations and prompt for learning and the sub-dimensions of planning and setting objectives and the use of strategy and evaluation in the study which is a remarkable finding in that it further ascertains that affective input characteristics and cognitive input characteristics influence each other positively.

Metacognitive strategies and social strategies have the second highest correlation in this study. In this context, it is possible to say that social strategies and metacognitive strategies affect each other at a significant level. It was found that the highest correlation in the study was between planning and setting objectives and the use of strategy and evaluation. Strategies may be defined as fundamental tools for the efficient acquisition of the target language, and planning can be described as learners' selecting the correct tools through analyzing current data. Moreover, a significant difference was observed in favor of females by gender in planning and setting objectives as well as the use of strategy and evaluation sub-dimensions of the self-regulative learning scale, which has the highest correlation in the study. According to the findings of the present study, females tend to raise their level of preparedness while learning a language. Also, in the study by Zimmerman and Martinez-Pons (1990), a significant difference was found in planning and setting objectives in favor of females. This is in line with Turan's (2009) study in which a difference was found in favor of females in the planning and setting objectives sub-dimension.

After the analysis and interpretation of the interview responses of students with the highest and lowest grade-point averages, it was revealed that the two groups of students have similarities and differences. Both groups taking part in the interviews accept English a universal language and aim to be proficient users so as to find a job, to improve themselves and to become successful in their professions. This finding reveals that students show a positive attitude towards learning English. Uludağ (2014) concludes in the study conducted with prep class students that students have a positive attitude towards English, they have high level of motivation, and have expectations to learn this language which coincides with the findings of this study. Davras and Bulgan (2012) found that students are aware of the fact that learning English at school is key to their prospective business life. Similarly, they are aware that knowledge of the English language is the cornerstone of communication, in particular, in the tourism sector, which is in line with the findings in this study.

Another common feature of the two groups of students in this study is that students do not study in a planned manner. Gökdemir (2005) also reports that students in English preparatory classes do not spend sufficient time and effort to learn English. Students try to solve a problem by consulting a lecturer or somebody who knows the language when they encounter problems in the language learning process. Tüz (1995) concluded that both successful and not so successful student groups use the same type of learning techniques. This result supports the findings of the present study.

Another characteristic students expressed is that they transfer what they have learnt in English to daily life by watching movies, programs, serials in English on TV, listening to songs, and reading English books, and magazines. However, they did not contemplate on the issue of speaking English as much as they mentioned other activities. In the interviews performed in the study, students remarked that a great deal of importance is laid upon grammar, which caused a feeling of obligation to be more dependent upon rules, which in turn negatively affected their communicative abilities despite their desire to perform well in this area. Even though it was observed that lecturers prompted students to speak all the time in the classrooms, and they provided feedback welcoming grammatical mistakes in tolerance, additional lessons should be included in the curriculum so that the speaking skills of the students can be improved.

Altay (2013) found that students often need to practice extensively in real life while learning English and they want to speak English fluently. It was further stated by Davras and Bulgan (2012) that students desired to practice more. Gökdemir (2005) stated that English lessons in preparatory classes are mainly coursebook centered rather than practice-based, and that not many methods were used to keep students active. In the current study, students in both groups are of the same opinion that memorizing and learning words are closely related and that using words in daily life has an impact on learning the words.

Based on the interview responses given by students in both groups, it was also concluded that there are differences among the participating students. One of such differences is that those students with the highest grade-point averages enjoy learning English much more than the students in the other group. This result may support an opinion that positive attitude towards English increases success. Although students in both of the groups stated that they do not make a sufficient effort to learn English, students in the group with the highest grade-point averages are separated from the students in the group with the lowest grade-point averages in that the first group do not perceive their efforts in this respect as a burden, and the latter do not make any effort at all as they remain frustrated. Another distinction between the two

groups of students is that students with the highest grade-point averages prefer activities based on listening much more than the other group. Whereas the students with the lowest grade-point averages consider their memory strengths as insufficient or medium-level, the students with the highest grade-point averages believe that their memories are strong, and they show a tendency towards making sense of the new words much more than the students with lowest grade-point averages while learning English.

Based on the data obtained through observation of two classrooms which were determined according to the highest and lowest grade-point averages, behavior within the scope of language learning strategies were observed in a higher rate in both groups than critical thinking and self-regulation skills. Hamamcı's (2012) finding on students using language learning strategies at a high level supports the finding of this study. Moreover, in the study, Hamamcı (2012) stated that metacognitive strategies had the highest average, which is followed by cognitive strategies and recovery strategies. İpek (2012) concluded that successful students used metacognition and recovery strategies most.

Çakır (2012) specified that students at different levels of English competency used language strategies in very close proportions to each other and language learning strategies had an impact on success. Behaviors in respect to critical thinking and self-regulation skills were observed respectively in the second item and third item in each group in this study. In the study conducted with university students learning English, Tarakçıoğlu (2008) found that students could reflect on their critical thinking skills in their foreign language to some extent. However, they had difficulty in doing so because they do not have enough competency in the foreign language. The same opinion was reached in the current study when the observation notes are taken into account. No significant difference was observed between the classrooms on the basis of grade-point averages regarding critical thinking and self-regulation skills. However, it was observed that behaviors based on encouraging one's self, asking questions, practicing, establishing mental associations, problem solving, and making estimations are exhibited at a greater frequency by the students in the classroom with the highest grade-point average than the students in the classroom with the lowest grade-point average.

4.1. Recommendations

Preparatory school students are registered as students who will study in different programs after they pass the language exams. Therefore, considering that students' readiness in English language may differ, ensuring homogeneity in their classrooms is an important challenge. Because the number of students registered for the following year in the departments differs, it is rather likely that successful students receive education in the same classrooms with less successful students, and it may result in the boredom of successful students or the neglect of unsuccessful ones.

Students can gain proficiency in English by learning subjects in the English lessons thoroughly from the beginner's level to the advanced level because learning English is a comprehensive process. In prep schools, lessons are taught mainly via reading of the texts and completing the activities given in the coursebooks. Such activities also include developing four basic language skills. These books are followed in basic lessons called "Main Courses" under the guidance of course instructors. Other than the main courses, 4 hours for grammar and 4 hours for reading and writing skills are also included in the weekly program. However, it is essential to provide more hours for speaking and listening skills in the curriculum.

When the observation data is analyzed, a guidance course may be included in the curriculum in order to improve language learning strategies of students with reference to the research finding that successful students use language learning strategies more than the less successful ones. Such a guiding course may be helpful to increase students' awareness in the process of learning a foreign language.

In this study, the relationship among language learning strategies, critical thinking and self-regulation skills in the process of learning English was examined while conducting interviews with students and observing them. Further research, especially experimental ones can be conducted on vocational high school students with the purpose of revealing the effect of language learning strategies, critical thinking and self-regulation skills on students' success in language learning. In addition, a qualitative longitudinal study can be carried out in which English language instructors as well as students will be interviewed and observed to shed light on how the curriculum affects students' development.

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