The Relation Between English Learning Students' Levels of Self-Regulation and Metacognitive Skills and Their English Academic Achievements

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Abstract
It is remarkable that there are only a few studies that measures to what extent metacognitive and self-regulation skills affect students' academic achievements in the English lesson. This study is important for identifying the personal variables that have an impact on metacognitive and self-regulation skill and determining the relationship between these skills and the academic achievement in the English lesson. The purpose of the study is to see if there is a relationship between preparatory class students' metacognitive and self-regulation skills and their academic achievements in learning a language and to determine whether students' levels of metacognitive and self-regulation skills differ by certain variables. Descriptive survey method, one of the quantitative research models, was used in this study and data was collected by two scales. Students' grades in the first mid-term exam were used to determine their academic achievements. It was concluded that the students had high levels of self-regulation and metacognitive skills. Whereas students' self-regulation skills differed in favor of the female students, it was found that these skills did not differ by age, students' faculties, type of education, and type of graduation high school. A positive, significant relationship was revealed between students' self-regulation skills and academic achievements in the English lesson. While there was a relationship students' self-regulation skills and academic achievements in the English lesson, no significant relationship was found between their metacognitive skills and academic achievements. It was concluded that students' levels of metacognitive skills differed in favor of the female students but not by students' faculties, type of education, ages, and type of graduation high school.
Keywords: metacognition, self-regulation, preparatory class student, academic achievement, English

1. Introduction
In this era in which people can do business and make touristic trips in different areas of the world comfortably, they feel the urge to go beyond the borders of their own countries and communicate with different cultures (Özkanal and Hakan, 2010). English which is irresistibly the communication language around the glove (Mede and Uygun, 2014) has become a world language which everyone wants to learn. Thus, there are great number of studies in which different instructional methods and techniques for English teaching are investigated and the achievement of the instruction is measured in an effort. Education provided at schools is not sufficient alone for adapting to developing and renewed needs (Akbaş and Özdemir, 2002). This is why it is necessary for individuals to manage their own learning process purposively and willingly so they can acquire complex information and skills during the educational process or in different domains of life (Rheinberg et al., 2000). Therefore, in the 21th century in which one of the primary objectives of education is to provide students with the ability to regulate their own learning in accordance with the common understanding that cognition is controlled by metacognitive processes (Özbay, 2008), it is known that individuals can acquire certain information and skills without being taught anything. Individuals acquiring these self-regulation skills make it possible to obtain new information and skills they encounter in professional, social or academic life following the completion of the formal education and open the doors of lifelong learning for them (Zimmerman, 2002; Puustinen and Pulkkinen, 2001).

Introduced on an intense level in 1980s, self-regulation is a process through which students efficiently include their metacognitive skills into their own learning processes (Zimmerman, 2001), in which they set goals for themselves and take the responsibility of their own learning when achieving those goals (Turingan and Yang, 2009 and regulate and control their own cognitions and behaviors (Pintrich, 2004). Winne (1996) defines self-regulation as a type of education comprising of metacognition, internal motivation and strategies. Hence, self-regulation is a process in which students set goals for themselves, choose suitable strategies in the learning process and regulate their own behaviors when necessary, control their motivations, set their metacognitive skills to work and monitor and assess their performances to direct their future learning (Zimmerman, 2001, Turingan and Yang, 2009; Winne, 1996; Pintrich, 2004). According to Zimmerman, who is the first scientist to mention the concept of self-regulation in educational psychology (Vardar, 2011), self-regulation skill is the best predictor of students' academic achievement (Cheng, 2011) and use of this skill facilitates learning (Senemoğlu, 2004).

Students with self-regulation skill do not regard learning as an activity which is provided to them but

as an activity which they perform on their own (Zimmerman and Schunk, 1998). Such students are always active in their own learning processes. As they are well aware of their own abilities, skills, advantages or disadvantages, they monitor themselves in the process of achieving the goals they have set and are aware of their improvement during the process and reregulate their own behaviors and cognitions in accordance with their needs if necessary. According to Zimmerman and Schunk (1998), these students see academic learning as an experience that requires preparation, self-discipline, motivation, and behavioral and cognitive procedures. As well as performing successfully in achieving their goals, students with high self-regulation skill also excel at their lifelong learning skills after their educational lives. Such students perform well in developing creative projects in domains such as art, literature and science after having graduated from their schools (Zimmerman, 2002). Research on the topic has shown that students with high cognitive skill and self-regulation skill and students who have developed awareness of these skills are more strategic and perform better than students who are not aware of these skills (Schraw & Dennison 1994 in Tonbuloğlu and Aslan, 2013).

The concept of cognition which was introduced by Brown (1975) and Flavell (1976) (Alcı and Altun, 2007) refers to students' awareness of their own thinking procedures and their control on these procedures (Flavell, 1979). This concept includes individuals becoming aware of their own knowledge, managing to control that during the learning process and regulate it when necessary. Metacognition is composed of three strategies- self regulation planning, monitoring and regulation (Zimmerman and Martinez-Ponsa, 1988). Planning includes procedures such as goal setting, task analysis, choice of necessary materials, and planning at the beginning of the procedure. Being one of the strategies that must be used along with the monitoring strategy for the regulation of learning (Butler and Winne, 1995), regulation strategy is related to monitoring strategy and includes students' harmony with cognitive activities and the decision-making procedure regarding the continuance of those activities. According to Başyayla (2007), individuals who have cognitive behaviors are very successful at performing actions such as planning what to study, choosing the sources, defining the roles, distributing those roles and dividing duties among the group members (Tonbuloğlu and Aslan, 2013). Furthermore, such individuals are good at foreign linguistic skills, gathering their attention, keeping things in memory and the social interactions (Iwai, 2016). Cognitive strategies are of importance for language-learning achievement. Because, learning process for language learners includes too many novelties, unknown rules, surprising rules, different writing systems, unexplainable social customs and unconventional instructional approaches. Amidst such great number of new concepts, students lose their focuses and compensate this drawback using such cognitive strategies as attention focusing or association between the known and the unknown (Oxford, 1990 *in* Vardar, 2011).

An increase has been recently observed in the number of research studies which feature individuals' self-regulation and metacognitive skills (Ruban and Reis, 2006). There are studies which investigate the effect of these concepts on English teaching as in many other domains. In the literature, it is seen that there are studies measuring secondary-education students' metacognitive awareness levels (Demirel and Turan, 2010; Kaya and Fırat, 2011), measuring the effect of different learning methods and techniques on self-regulation (Koç and Gömleksiz, 2009; Güvenç, 2010; Arsal, 2010; Sağırlı et al., 2010), investigating the relationships between students' self-regulation skills and their academic achievements in several lessons (Garduno, 1997; Üredi and Üredi, 2005; Mandacı Şahin, 2010; Turan and Demirel, 2010; Kitsansas, Cheema and Wane, 2011; Cheng, 2011), and assessing students' metacognitive awareness levels in different lessons(Kahraman and Sungur, 2011; Atay, 2014). When reviewing the literature with the concepts of self-regulation, metacognition and English, other studies which try to identify primary school students' self-regulation skills for the English lesson (Çölok, 2010), which measure students metacognitive awareness of the English lesson (Kızılay, 2011; Feiz, J. P., 2016) and self-regulation competencies regarding the English lesson (Özkasap, 2009) and measure the relationship between different variables such as teachers' instructional styles, language-learning strategies, critical thinking and cooperative learning and students' self-regulation skills (Aktan, 2012; Altay, 2013; Batdı, 2013) have also been observed. In a general overview of the literature, there are studies that investigate the relationship of using the self-regulation strategies with academic achievement, use of strategy, and attitude in lessons including Mathematics, Science, Chemistry and Biology and that investigate the effect of different learning and instructional processes such as cooperative learning on the use of self-regulation strategies. Yet, it is remarkable that there are only a few studies that measures to what extent metacognitive and self-regulation skills affect students' academic achievements in the English lesson. Furthermore, these studies which are few in number do not address the achievement in the English lesson in a general manner (Koehler, 2007; Ghasemi, 2010; Balıkçıoğlu and Efe, 2016) but measure the achievement in the areas of writing (Özbay, 2008; Kılıç, 2016) and vocabulary (Özdemir, 2014). This study mentions preparatory class students' metacognitive and self-regulation skills and the relationship between these skills and their academic achievements in the English lesson.

1.1 Purpose of the Research

This research generally aims at determining whether there is a relationship between preparatory class students'

metacognitive and self-regulation skills and their academic achievements in learning a language and at establishing whether students' levels of metacognitive and self-regulation skills differ by certain variables. To this end, the answers of the following questions were sought:

1. What are students' levels of self-regulation and metacognitive skills?
2. Do students' levels of self-regulation skills differ by their personality traits?
3. Do students' levels of metacognitive skills differ by their personality traits?
4. Is there a significant relationship between students' self-regulation skills and metacognitive skills and their academic achievement in the English lesson?

2. Method

2.1 Research Model

Single and relational survey techniques, which are quantitative research methods, were used in the research. According to Karasar (2011), descriptive survey model is a research approach aiming to describe a past or current situation as it was or is. Yıldırım and Şimşek (2013) argue that the descriptive model refers to the investigation of a current situation of the subject and the manifestation of the relationship among variables without any alteration.

2.2 Population and Sample

The population of this research is composed of all the students (N: 700) who are taking the English lesson in the department of Basic English of the Foreign Languages College at a state university in the Western Black Sea Region in Turkey in the 2016-2016 academic year. Where it is difficult to reach the whole population, selecting a sample with high percentage of representing the related population rather than studying with the whole population provides researchers with great convenience (Ural and Kılıç, 2010). So, sampling method was utilized in this research due to the magnitude of the population.

It was aimed that 50% of the population would be reached in the study. Therefore, 350 copies of each of two scales were applied to the students through the lecturers working at the Foreign Languages College Department of Basic English. The lecturers were informed of the scales before the application. They were asked to inform students and have those who volunteered fill the scales. The scales were applied at the beginning of the lesson and took about 20 minutes. After the application, 40 of each of the scales were excluded from the assessment for reasons such as imprecise filling and leaving statements blank. Demographics of the students who participated in the research are shown in Table 1.

Table 1. Number and Percentages of the Students by their Demographics

Demographics		n	%	Total
Gender	Female	195	62.9	310
	Male	115	37.1	
Department	Faculty of Economics and Administrative Sciences	47	15.2	310
	Faculty of Engineering	45	14.5	
	Applied Translation in English	180	58.1	
	Faculty of Science and Letters	38	12.3	
Age	18	109	35.2	310
	19	97	31.3	
	20	56	18.1	
	21+	48	15.5	
Type of Education	Daytime Education	196	63.2	310
	Evening Education	114	36.8	
Type of High School	Anatolian High School	134	43.2	310
	Vocational High School	71	22.9	
	High School	49	15.8	
	Religious Vocational High School	39	12.6	
	Open High School	17	5.5	
Grade of Mid-Term Exam I	0-44	40	12.9	310
	45-57	70	22.6	
	58-72	83	26.8	
	73-86	81	26.1	
	87-100	36	11.6	

As seen in Table 1, 62.9% of the students who participated in the study are female, 37.1% are male. 58.1% of them are studying Applied Translation in English, 15.2% are studying in the departments of the Faculty of Economics and Administrative science, 14.5% are studying in the departments of the Faculty of Engineering, and 12.3 are studying in the departments of the Faculty of Science and Letters. Majority of the students are 18 and 19 years old (66.5%). They are followed by the students who are 20 years old (18.1%) and the students older than 21 years (15.5%). 196 (63.2%)of the students are receiving daytime education, 114 (36.8%) are receiving evening education. Majority (43.2%) of them graduated from an Anatolian High School. These students are followed by those who graduated from a vocational high school (22.9%), a high school (15.8%), a religious vocational high school (12.6%), and an open high school (5.5%). Majority of the grades which the students achieved in the first mid-term exam varied between 58 and 72 (26.8%) and 73 and 86 (26.1%). Those grades are followed by the ranges of 45-57 (22.6%), 0-44 (12.9%), and 87-100 (11.6%).

2.3 Data Collection Instruments

The data were collected with two scales in the research. One of them is the Self-Regulated Learning Scale developed by Turan (2009) for identifying students' self-regulation skills. The Self-Regulated Learning Scale is a 5-point Likert-type scale which is composed of four subdimensions and 41 items to identify students' self-regulation skills. There are 7 items in the dimension of motivation and mobilization for learning, 8 items in the planning dimension, 19 items in the dimension of use of strategy and evaluation, and 7 items in the learning dependency dimension. The lowest score that can be obtained in the scale is 41 and the highest one is 205. In the pilot application performed with 908 students, the total variance explained by the scale was found to be 47.10%. While reliability coefficients of the scale subdimensions vary between 0.76 and 0.91, the reliability coefficient of the whole scale is 0.91.

The other scale is the Metacognition Scale which was developed by Turan (2009) utilizing the items of the Metacognitive Awareness Inventory developed by Schraw and Dennison (1994) to identify students' metacognitive skills. The scale is a 5-point Likert-type scale composed of one subdimension and 28 items. The lowest score that can be obtained in the scale is 28 and the highest one is 140. The total variance explained by the scale was found to be 54.55%. Scale's reliability coefficient is 0.93.

Students' grades in the first mid-term exam were used to determine their academic achievements. The

first mid-term exam is an extensive exam which assesses students' speaking, writing, reading and listening skills.

2.4 Data Analysis
Values of mean and standard deviation were considered to interpret students' levels of self-regulation and metacognitive skills. Range values of the scale were calculated to be 5-1=4 4/5=0.80 because it is a 5-point Likert-type scale. Accordingly, it was implied that the students strongly agreed with the statement in the item if the mean of the answers given varied between 5- and 4.20, the students agreed the statement if the mean of the answers given varied between 4.19 and 3.40, the students either agreed or disagreed if the mean of the answers given varied between 3.39 and 2.60, the students disagreed if the mean of the answers given varied between 2.59 and 1.80, and the students strongly disagreed with the item if the mean of the answers given varied between 1.79 and 1. Independent Samples t-test, single-factor variance analysis (One-Way ANOVA), and Pearson's Moment Correlation Coefficient test were used when looking for answers to other research problems because the distribution was normal (p>0.05).

3. Findings and Interpretation
The answer was looked for on what level students' self-regulation and metacognitive levels were in the first research problem. To this end, arithmetic means of the answers given by the students and their standard deviation values were calculated, and these are given in Table 2.

Table 2. Students' Levels of Self-Regulation and Metacognitive Skills

Skills	$\overline{X}$	sd
Self-Regulation Skills	3.67	0.48
Metacognitive Skills	3.68	0.51

It is seen in Table 2 that students' self-regulation skills are on the "Agree" level ($\overline{X}$: 3.67) and on a high level. Their cognitive skills are also on the "Agree" level ($\overline{X}$: 3.68) and on a high level, too. Therefore, it can be said that self-regulation and metacognitive skills of the preparatory class student who are receiving English education are on a sufficient level.

An independent samples t-test was performed to determine whether students' self-regulation skills differed significantly by gender and type of education, and the results are given in Table 3.

Table 3. Examination of Students' Self-Regulation Skills by Gender and Type of Education

	Gender	n	$\overline{X}$	sd	t	p
Self-Regulation Skills	Female	195	3.73	0.45	2.821	.005
	Male	115	3.57	0.53		
	Type of Education	n	$\overline{X}$	sd	t	p
Self-Regulation Skills	Daytime Education	196	3.65	0.45	-0.555	.579
	Evening Education	114	3.69	0.54		

The difference was found to be significant in the t-test which was performed to determine whether students' self-regulation skills differed by gender (t_{310}=2.821, p<.05). Female students' self-regulation skills have significantly higher ($\overline{X}$:3.73) than male students' skills ($\overline{X}$:3.57). Therefore, gender variable is a factor that differentiates students' self-regulation skills in favor of female students. It is seen that the female students have higher levels of self-regulation skill than the male students do. The difference was found not to be significant in the t-test which was performed to determine whether students' self-regulation skills differed by type of education (t_{310}= -0.555, p<.05). It can be implied from the finding that students' self-regulation skills do not differ by type of education.

A single-factor variance analysis was performed to determine whether students' self-regulation skills differed significantly by students' faculties, ages and type of graduation high school, and the results are presented in Table 4.

Table 4. Examination of Students' Self-Regulation Skills by their Faculties, Ages, and Type of Graduation High School

Faculty	n	$\overline{X}$	ss	sd	F	P	Significant Difference
Faculty of Economics and Administrative Sciences	47	3.56	0.47				
Faculty of Engineering	45	3.68	0.45	3/306	0.930	.426	-
Applied Translation in English	180	3.69	0.50				
Faculty of Science and Letters	38	3.69	0.48				

Age	n	$\overline{X}$	ss	sd	F	P	Significant Difference
18	109	3.72	0.47				
19	97	3.59	0.44	3/306	1.871	.134	-
20	56	3.62	0.46				
21+	48	3.75	0.60				

Type of High School	n	$\overline{X}$	ss	sd	F	P	Significant Difference
Anatolian High School	134	3.69	0.43				
Vocational High School	71	3.72	0.46				
High School	49	3.64	0.58	4/305	1.260	.286	-
Religious Vocational High School	39	3.64	0.48				
Open High School	17	3.43	0.69				

It was determined that the difference was not significant in the variance analysis which was performed to find out whether students' self-regulation skills differed by their faculties ($F_{310}=0.930$, p>.05), ages ($F_{310}=1.871$, p>.05) and type of graduation high school ($F_{310}=1.260$, p>.05). It can be accordingly said that the variables of faculty, age and type of graduation high school do not have any impact on self-regulation skills.

An independent samples t-test was performed to determine whether students' metacognitive skills differed significantly by gender and type of education, and the results are given in Table 5.

Table 5. Examination of Students' Metacognitive Skills by Gender and Type of Education

	Gender	n	$\overline{X}$	sd	t	p
Metacognitive Skills	Female	195	3.74	0.49	2.792	.006
	Male	115	3.58	0.54		
	Type of Education	n	$\overline{X}$	sd	t	p
Metacognitive Skills	Daytime Education	196	3.64	0.46	-1.697	.091
	Evening Education	114	3.75	0.58		

In the t-test performed to see whether students' metacognitive skills differed by gender and type of education, their metacognitive skills differed significantly by gender ($t_{310}=2.792$, p<.05) while they did not differ by type of education ($t_{310}=-1.697$, p>.05). Then, it can be implied from the finding that students' metacognitive skills do not differ by type of education. By gender, female students' metacognitive skills ($\overline{X}$:3.74) are significantly higher than male students' skills ($\overline{X}$:3.58). Therefore, gender variable is a factor that differentiates students' metacognitive skills in favor of female students.

A single-factor variance analysis was performed to determine whether students' metacognitive skills differed significantly by students' faculties, ages and type of graduation high school, and the results are presented in Table 6.

Table 6. Examination of Students' Metacognitive Skills by their Faculties, Ages, and Type of Graduation High School

Faculty	n	$\overline{X}$	ss	sd	F	P	Significant Difference
Faculty of Economics and Administrative Sciences	47	3.61	0.45				
Faculty of Engineering	45	3.63	0.44	3/306	0.662	.576	-
Applied Translation in English	180	3.71	0.54				
Faculty of Science and Letters	38	3.69	0.52				
Age	n	$\overline{X}$	Ss	sd	F	P	Significant Difference
18	109	3.70	0.51				
19	97	3.64	0.48	3/306	0.731	.534	-
20	56	3.65	0.55				
21+	48	3.76	0.55				
Type of High School	n	$\overline{X}$	ss	sd	F	P	Significant Difference
Anatolian High School	134	3.68	0.48				
Vocational High School	71	3.70	0.54				
High School	49	3.67	0.56	4/305	0.109	.979	-
Religious Vocational High School	39	3.70	0.44				
Open High School	17	3.62	0.69				

It was determined that the difference was not significant in the variance analysis which was performed to find out whether students' metacognitive skills differed by their faculties (F_{310}=0.662, p>.05), ages (F_{310}=0.731, p>.05) and type of graduation high school (F_{310}=0.109, p>.05). In the light of these findings, it can be said that students' faculties, ages and type of graduation high school are not among factors which affect their metacognitive skills.

A Pearson's Moment Correlation Coefficient test was performed to see if there was a significant relationship between students' levels of self-regulation and metacognitive skills and their academic achievement in the English lesson, and the results are given in Table 7.

Table 7. Examination of the Relationship Between Students' Levels of Self-Regulation and Metacognitive Skills and their Academic Achievements

Variables	Metacognition	Self-Regulation	Academic Achievement
Metacognition	--------	.011	.077
Self-Regulation	.011	-------	.135*
Academic Achievement	.079	.135*	-------

A Pearson's Moment Correlation Coefficient test was applied to determine whether there was a significant relationship between students' scores of self-regulation skill and metacognitive skills and their academic achievement in the English lesson. Accordingly, no significant relationship was found between students' scores of self-regulation skill and their metacognitive skills (r=.011, p>.05). Thus, increasing metacognitive skills do not mean an increase in self-regulation skills just as increasing self-regulation skills do not mean an increase in metacognitive skills. It was determined that there was no significant and remarkable relationship between students' scores of metacognitive skills and their academic achievement scores in the English lesson but it was a relatively low-level, positive relationship (r=.079, p>.05). It can be accordingly said that students' academic achievements in the English lesson should increase on a low level if their metacognitive skills increase, too. It was found that there was a positive, low-level and significant relationship between students' self-regulation skills and their academic achievement levels in the English lesson (r=.135, p<.05). According to this relationship, it can be said that students' academic achievements should increase on a low level as their self-regulation skills increase, too.

The data which were achieved in the regression analysis regarding the prediction of academic achievement in the English lesson by their self-regulation and metacognitive skills are given in Table 8.

Table 8. Regression Analysis Regarding the Prediction of Students' Self-Regulation and Metacognitive Skills

Variables	B	Sh	β	T	p	Dual r	Partial r
Constant	1.680	.018		28.241	.000		
Students' Academic Achievement Levels in the English Lesson	.535	.011	.135	26.592	.000	.135	.135

FR (1-485) R=28.241, p<.01, R=.135, RP2P=.592

It is seen that there is a low-level, positive and significant relationship between students' levels of self-regulation and metacognitive skills and their academic achievements in the English lesson (R=.135, p<.01). Their self-regulation and metacognitive skills explain about 18% of the total variance in their academic achievements in the English lesson. Again, their self-regulation and metacognitive skills (β=.135, p<.01) predict their academic achievement in the English lesson positively and significantly. When examining the dual and partial correlations between students' self-regulation and metacognitive skills and their academic achievements in the English lesson, it is seen that there is a positive and low-level relationship (r=.135) between those skills and their academic achievement. According to the results of the t-test regarding the significance of regression coefficients, it can be said that students' self-regulation and metacognitive skills significantly predict the variable of academic achievement in the English lesson.

5. Conclusion and Discussion
Following the analysis of the data obtain to identify students' self-regulation and metacognitive skills, it was concluded that students have high levels of self-regulation and metacognitive skills. In parallel with these research results, Çölok (2010) achieved the result that elementary school 5th-, 6th-, 7th-, and 8th-grade students have high levels of self-regulation skills. In the same study, whereas students' self-regulation skills differed in favor of the female students, it was found that these skills did not differ by age, students' faculties, type of education, and type of graduation high school. It is seen in the literature that there are other studies coinciding with these results which concluded that female students have higher levels of self-regulation skills than male students do (Alcı and Altun, 2007; Çölok, 2010; Khatib, 2010; Aktan, 2012; Altay, 2013; Özdinç, 2013). Furthermore, Özdinç (2013), too, concluded in the study with foreign languages college that students' self-regulation skills do no differ by the type of graduation high school. Alcı and Altun (2007) revealed in their study that students' self-regulation skills did not significantly differ by the branch they are studying at the high school. This result achieved by Alcı and Altun (2007) coincides with the results in this study that students' self-regulation skills do not differ by the faculty they are studying in.

A low-level, positive and significant relationship was revealed between students' self-regulation skills and academic achievements in the English lesson. It is observed in the literature that there are studies which concluded that there is a significant relationship between self-regulation skills and academic achievement in different lessons (Üredi and Üredi, 2005; Camahalan, 2006; Schloemer and Brenan, 2006; Aktan, 2012; Atay, 2014; Memiş and Arıcan, 2013) and other studies which concluded that there is a significant relationship between students' self-regulation skills and academic achievements in the English lesson (Vardar, 2011; Özdemir, 2014; Özdinç, 2013; Kılıç, 2016). It was concluded that students' levels of metacognitive skills differed in favor of the female students but not by students' faculties, type of education, ages, and type of graduation high school. These results are in parallel with the result achieved by Atay (2014) that metacognitive levels differ by gender. In addition, it is known that there are other studies in the literature which concluded that students' levels of metacognitive skills differ by gender (Alcı and Altun, 2007; Demir and Özmen, 2011; Kaya and Fırat, 2011; Koç and Karabağ, 2013; Memiş and Arıcan, 2013; Tüysüz, 2013; Öztürk, 2014). In parallel with a finding of this study, Öztürk (2014) concluded that students' metacognitive levels do not significantly differ by students' faculty, age and the type of graduation high school. Alcı and Altun (2007) revealed in their study that students' metacognitive skills do not differ by the branch they are studying at the high school. Hence, this result achieved by Alcı and Altun (2007) coincides with the results in this study that students' metacognitive skills do not differ by the faculty they are studying in.

It was concluded in this research that there is no significant relationship between students' metacognitive skills and their academic achievements in the English Lesson. Şahin and Küçüksüleymanoğlu (2015) concluded in their study which aimed at examining self-managed learning preparedness levels, metacognitive awareness and locus of control of preservice teachers of different branches, identifying the relationships among them and comparing them by certain variables that preservice teachers' levels of metacognitive skills do not differ by their academic achievements, which is a result that coincides with the results of this study. Despite concluding that there is no significant relationship between students' metacognitive skills and their achievements in the Verbal Communication Skills I lesson, Öztürk (2014) stated in the study conducted with 430 first-year students studying at four different state universities that there is a significant relationship between their achievement in the English lesson and metacognitive skills. Hence, the result achieved by Öztürk (2014) shows partial parallelism with the results of this study.

Based on the findings obtained in the study, students' high levels of metacognitive skills indicate that they are importantly strategists, are aware of their own strengths and have the potential of developing new learning strategies. These characteristics are far too original that they cannot differ by other demographics other than gender. While it is expected that these characteristics of the students have an impact on their English-learning academic achievements and increase the achievement, that relationship was found to be on such a low level that it cannot be significant. This can be explained by the fact that students cannot use their metacognitive skills to increase their academic achievements accurately or are not directed sufficiently to that end. Students with high metacognitive levels need to be directed accurately so that they can use these characteristics to facilitate learning. The fact that gender is a factor which has a positive impact on students' metacognitive levels may be caused by female students' high levels of awareness. Likewise, students' high levels of self-regulation levels, their awareness of their own skills, how they know how to learn and how they are sufficient in setting learning strategies refer to an important result. While these characteristics are more distinct among the female students and older students, they are on an acceptable level among the male students and younger students. Furthermore, it is seen that their awareness of their own skills, how they know how to learn and how they are sufficient in setting learning strategies reflects on their English-learning academic achievements positively. Knowing oneself, being aware of one's skills, strategic studying and similar characteristics, which are students' self-regulation skills, have reflected on and improved their English-learning academic achievements.

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